

# **STRIPED BASS ANGLERS' ATTITUDES TOWARD FISHERIES MANAGEMENT ON LAKE MURRAY**

**Conducted for the  
Fisheries Section of the South Carolina  
Department of Natural Resources**



**Responsive Management  
January 2000**

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## **EXECUTIVE SUMMARY**

This study was conducted for the Fisheries Section of the South Carolina Department of Natural Resources to ascertain the opinions and attitudes of striped bass anglers concerning fisheries management on Lake Murray.

### **Satisfaction with Fisheries Management on Lake Murray**

- 26% of respondents rated the quality of the striped bass fishery on Lake Murray as excellent, 52% as good, 16% as fair, 4% as poor, and 2% did not know.
- 29% of respondents stated that the Fisheries Section of the South Carolina Department of Natural Resources did an excellent job with respect to the striped bass fishery on Lake Murray. Fifty-three percent reported that the Department of Natural Resources did a good job, 10% fair, 2% poor, and 6% did not know.
- 90% of respondents were satisfied (49% very and 41% somewhat) with the Department of Natural Resources' management of striped bass on Lake Murray, 8% were dissatisfied, and 2% were neither satisfied nor dissatisfied.
- Of the respondents who were satisfied with the Department's management of striped bass on Lake Murray, 64% cited plenty of fish as the main reason for their satisfaction.
- Other reasons for satisfaction with the Department's management of striped bass on Lake Murray included: Sufficient law enforcement (34%), quality of fish health and 5 fish

creel limit (each 27%), good water quality (26%), 21 inch length limit (25%), and plenty of large/trophy fish (12%).

### **Awareness and Perception of the 5/21 Regulation**

- 77% of respondents reported that before taking this survey they were aware that Lake Murray was a put-grow-and-take fishery. Twenty-two percent were not aware.

- 43% of respondents reported that fishing for striped bass on Lake Murray had improved (12% greatly and 31% somewhat) since the 5/21 was put in place, 13% reported it had declined (9% somewhat and 4% greatly), and 20% reported it had stayed the same.

One-quarter of respondents had not fished on Lake Murray before the 5/21 went into effect.

- 38% of respondents reported that, since the 5/21 was put into effect, there were more **quality** striped bass (8% much more and 30% somewhat more) on Lake Murray. Twenty-two percent reported there were less quality striped bass (14% somewhat and 8% much less), 19% reported the same, and 20% did not know.

- 22% of respondents reported that, since the 5/21 was put into effect, there were more **trophy** striped bass (4% much more and 18% somewhat more) on Lake Murray. Thirty-four percent reported there were less trophy striped bass (21% somewhat and 13% much less), 18% reported there were the same numbers, and 27% did not know.

### **Definition of Keeper, Quality and Trophy Striped Bass**

- 84% of respondents stated size as the most important factor when defining a **striped bass worth keeping** and 21% reported weight to be a factor.

- For those respondents who reported size to be a factor when defining a striped bass worth keeping, 56% reported a size range of 20-23 inches as a 'keeper' size. Twenty-three percent reported keeper sizes of 16-19 inches, 14% reported sizes of 24-27 inches, 4% reported 12-15 inches, and 2% reported greater than 27 inches.
- Of the respondents who reported weight to be a factor when defining a striped bass worth keeping, 31% stated that 5-7 lb. fish were 'keepers', 19% stated 8-10 lb. fish, 14% stated greater than 16 lb. fish, 12% stated 2-4 lb. fish, 10% stated 14-16 lb. fish, 6% stated 11-13 lb. fish, and 10% did not know.
- 53% of respondents reported size to be a factor when defining a **quality striped bass**, 50% considered weight to be a factor and 6% did not know.
- Of the respondents that considered size to be a factor when defining a quality striped bass, 38% stated that 20-23 inch fish were quality fish, 33% stated 24-27 inch fish, 15% stated greater than 27 inch fish, 11% stated 16-19 inch fish, 2% stated 12-15 inch fish, and 2% did not know.
- Of the respondents that reported weight to be a factor when defining a quality striped bass, 31% stated 8-10 lb. fish were quality fish, 21% stated 5-7 lb. fish, 17% stated greater than 16 lb. fish, 16% stated 11-13 lb. fish, 10% stated 14-16 lb. fish, and 2% reported 2-4 lb. fish.
- 78% of respondents reported weight to be a factor when defining a **trophy striped bass**, 29% considered size to be a factor, and 6% did not know.

- Of the respondents that reported weight to be a factor when defining a trophy striped bass, 31% stated 16-20 lb. fish were trophy bass, 25% stated 26-30 lb. fish, 17% stated greater than 30 lb. fish, 15% stated 21-25 lb. fish, 6% stated 11-15 lb. fish, and 4% reported 5-10 lb. fish.

- Of the respondents that considered size to be a factor when defining a trophy striped bass, 44% stated that 30-33 inch fish were trophy bass, 30% stated greater than 33-inch fish, 9% stated 22-25 inch fish, 7% stated 26-29 inch fish, 3% stated 18-21 inch fish, and 9% did not know.

### **Impact of Catch-and-Release Fishing on Lake Murray**

- 73% of respondents stated that the release of fish smaller than the size limit sometimes caused the death of the fish. Fourteen percent reported that the release of fish smaller than the limit rarely caused their death and 11% reported that it always caused their death.

- 67% of respondents agreed (37% strongly and 30% somewhat) that even if catch-and-release caused the death of some fish, it was acceptable in order to improve the striped bass fishery on Lake Murray. Twenty-seven percent disagreed (13% somewhat and 14% strongly), 4% did not know, and 2% neither agreed nor disagreed.

- Respondents reported that catch-and-release in the summer months of June (28%), July (56%), and August (56%) was more of a problem for striped bass than in other months.

- Smaller percentages of striped bass anglers reported that catch-and-release was not a problem in any month of the year (19%) and that September was a problem month (14%). Fifteen percent did not know if it was a problem.

### **Summer Catch-and-Release Management Options on Lake Murray**

- 51% of respondents wanted the South Carolina Department of Natural Resources to allow 2 of the 5 fish creel limit to be less than 21 inches in the summer months.
- 29% of respondents wanted the South Carolina Department of Natural Resources to reduce the length limit to 18 inches during the summer months.
- 8% of respondents wanted the South Carolina Department of Natural Resources to remove the length limit, allowing any fish to be caught in the summer.
- 4% of respondents wanted the South Carolina Department of Natural Resources to not allow any striped bass to be caught in the summer.

### **Compliance with Catch-and-Release Fishing Regulations**

- 97% of respondents reported that they always released fish that were smaller than the legal size limit on Lake Murray, 2% sometimes released fish, and 1% never released fish that were under legal size.

### **Awareness of Catch-and-Release Publications**

- 63% of respondents were not aware of any South Carolina Department of Natural Resources' publications regarding catch-and-release of striped bass and other sport fish species and 36% were aware.

## **Fishing Techniques Used on Lake Murray**

Responses were rank ordered by techniques used most often:

- Made catch-and-release process as quick as possible (50%),
- Kept the fish in the water as much as possible (45%),
- Cut the line if hooked deeply (45%),
- Minimized the handling once the fish was reeled in (35%),
- Revived fish (30%),
- Used tools to remove hooks, including the use of gloves (26%),
- Played and landed the fish quickly (18%), and
- Used artificial lures (17%).

• 81% of respondents used straight-lining live or cut bait, 24% used trolling/down-lining with riggers, and 17% cast artificial lures while fishing for striped bass on Lake Murray.

• 64% of respondents reported that they did not regularly use circle hooks during the summer months, while fishing for striped bass on Lake Murray, 28% reported they did, and 8% did not know.

• 90% of those respondents who regularly used circle hooks were satisfied (54% very and 36% somewhat) with their experiences, 7% were neither satisfied nor dissatisfied, and 3% were somewhat dissatisfied.

- Respondents cited several reasons for their satisfaction with using circle hooks while fishing for striped bass on Lake Murray (multiple responses allowed): Easier on the fish after release/greater chance for survival (58%), able to catch more fish (36%), and easier to use in general (32%).

### **Area, Depth and Days Fished on Lake Murray**

In rank order of area most often fished:

- 80% of respondents fished between the dam and Spence Islands,
  - 20% fished from Spence Islands to Shull Island and the mouth of Bear Creek,
  - 12% fished from Shull Island and the mouth of Bear Creek to the Gap,
  - 6% fished from the Gap to the confluence of Saluda and Little Saluda Rivers (River Bend),
  - 4% fished up either river, and
  - 4% did not know where they fished.
- 58% of striped bass anglers reported most often catching fish during the summer on Lake Murray at depths of 30-59 feet below the surface, 22% reported depths of 60-89 feet and 12% reported depths of less than 29 feet below the surface. Five percent did not know the depth, and 2% reported catching bass at depths of 90-119 feet below the surface.

- 32% of respondents fished less than 11 days on Lake Murray from January 1, 1999 to December 1, 1999, 21% fished 11-20 days, 16% fished 21-30 days, 15% fished 31-40 days, 9% fished 41-50 days and 5% fished 51-200 days.

- 56% of respondents reported that since the 5/21 was put into effect, the number of days per year they fished for striped bass on Lake Murray had stayed the same, 24% reported an increase, and 9% reported a decrease. Twelve percent did not know.

### **Striped Bass Fishing Club Membership or Affiliation**

- 93% of respondents did not belong to or were not affiliated with any striped bass fishing clubs or organizations. Two percent belonged to the Midlands Striper Club and 2% belonged to the Striper Kings of Greenville.

### **Other Issues**

- 43% of respondents said that they were sometimes checked by South Carolina Department of Natural Resources law enforcement officers for undersized fish, or being over the limit for striped bass. Twenty-nine percent reported they were rarely checked, 22% reported they were never checked, and 4% reported that they were always checked.

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## **INTRODUCTION AND METHODOLOGY**

This study was conducted for the Fisheries Section of the South Carolina Department of Natural Resources to ascertain the opinions and attitudes of striped bass anglers concerning striped bass management on Lake Murray. The survey questionnaire was developed cooperatively between the Department and Responsive Management (RM). A pre-test of the questionnaire was conducted and revisions were based on these findings. Fieldwork for the survey was conducted from December 15, 1999 to January 8, 2000.

This survey was administered by telephone to striped bass anglers that had fished on Lake Murray. Telephones were the preferred medium to conduct this survey because nearly all potential respondents had access to a phone. The sample was provided by the South Carolina Department of Natural Resources. In addition, a central polling site allowed for rigorous quality control over the interviewers and data collection. Responsive Management maintains its own telephone interviewing facilities in-house and emphasized the importance of highly trained telephone interviewers working under the supervision of professional staff. These facilities were staffed by interviewers with experience conducting computer-assisted telephone interviews on the subject of natural resources and outdoor recreation for state fish and wildlife agencies and natural resource organizations. Interviewers were trained according to standards established by the Council of American Survey Research Organizations. Methods of instruction included lecture and role-playing. Professional staff randomly monitored interviewers to evaluate the performance of each interviewer.

Professional staff conducted project briefings with the interviewers prior to working on this project.

Interviewers were briefed and instructed on study goals and objectives, type of study, handling of survey questions, interview length, termination points, qualifiers for participation, reading of interviewer instructions, reading of survey, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey instrument. Professional staff edited each survey to check for clarity, understanding, completeness and form.

Interviews were conducted Monday through Friday from 9:00 a.m. to 9:00 p.m. and on Saturday from 10:00 a.m. to 4:00 p.m., local time. A multiple-callback design was used to maintain the representativeness of the sample, avoid bias toward people easy-to-reach by telephone and provided an equal opportunity for all to participate. Subsequent calls were placed at different times of the day and on different days of the week.

The software used for data collection was Questionnaire Programming Language (QPL) version 4.0 (National Technical Information Services, 1997). QPL is a comprehensive system for computer-assisted telephone interviewing. The survey data was entered into the computer as the interviews were being conducted, eliminating manual data entry after the completion of the interviews. The survey instrument was programmed so that QPL branched, coded, and substituted phrases in the survey based upon previous responses to ensure the integrity and consistency of data collection.

## **RESULTS**

Attempts were made to contact a total of 405 striped bass anglers that had fished Lake Murray which resulted in 21 disconnected telephones with no new number available, 2 language barrier problems, 2 hard refusals, 10 ineligible interviews, 2 government or business contacts, 118 soft refusals (“call back at a different time,” unavailable for duration of the survey, no answer/answering machine, or busy), and 250 completed surveys. Thus the response rate was 68%.

Throughout this report, most findings are reported at a 95% confidence interval. For the entire sample of Lake Murray striped bass anglers, the sampling error is at most plus or minus 6.5 percent (n=250). This means that if the survey was administered 100 times, to different samples that were selected in the same fashion, 95 of the 100 surveys’ findings would fall within plus or minus 6.5 percent of each other. Also, chi-square analyses were performed comparing responses on selected questions by demographic variables. Only significant findings at the  $p < .05$  level are reported. Some response distributions may not add up to 100% exactly due to rounding, and some questions allowed for multiple responses. Note: There were no significant differences between resident and non-resident responses for each question in this report. The lack of differences may be due to lack of true differences or to the large discrepancy between the sample sizes (residents  $n = 209$  and non-residents  $n = 41$ ).

## **Satisfaction with Fisheries Management on Lake Murray**

Striped bass anglers were asked a series of questions regarding the quality of striped-bass fisheries management on Lake Murray as well as their ratings on the Fisheries Section of the South Carolina Department of Natural Resources.

About one-third of all striped bass anglers gave excellent ratings on both the quality of striped bass fishing and on fisheries management and half of all respondents gave good ratings for the same.

- 26% of respondents rated the quality of the striped bass fishery on Lake Murray as excellent, 52% as good, 16% as fair, 4% as poor, and 2% did not know.
- 29% of respondents stated that the Fisheries Section of the South Carolina Department of Natural Resources did an excellent job with respect to the striped bass fishery on Lake Murray. Fifty-three percent reported that the Department of Natural Resources did a good job, 10% fair, 2% poor, and 6% did not know.

Approximately one-half of striped bass anglers were very satisfied with the Department's management of striped bass populations on Lake Murray. In particular, they were most satisfied with the size of the striped bass population.

- 90% of respondents were satisfied (49% very and 41% somewhat) with the Department of Natural Resources' management of striped bass on Lake Murray, 8% were dissatisfied, and 2% were neither satisfied nor dissatisfied.

- Of the respondents who were satisfied with the Department's management of striped bass on Lake Murray, 64% cited plenty of fish as the main reason for their satisfaction.
- Other reasons for satisfaction with the Department's management of striped bass on Lake Murray included: Sufficient law enforcement (34%), quality of fish health and 5 fish creel limit (each 27%), good water quality (26%), 21 inch length limit (25%), and plenty of large/trophy fish (12%). (Multiple responses allowed)

It is interesting to note that while 90% of respondents reported satisfaction with the Department's management of striped bass, 10% of these respondents would like to see the Department reduce the length limit.

## **Awareness and Perception of the 5/21 Regulation**

In this section, respondents were asked several questions regarding fishing regulations on Lake Murray. First they were asked a general awareness question, “Before taking this survey, were you aware that Lake Murray is a put-grow-and-take fishery, that is, it is maintained by yearly stockings of 1 inch fish that are allowed to grow until reaching the size limit?”

- 77% of respondents reported that before taking this survey they were aware that Lake Murray was a put-grow-and-take fishery. Twenty-two percent were not aware.

Next, respondents were asked several questions about their perceptions of the impact of the 5/21 regulation on the improvement of striped bass fishing on Lake Murray.

Respondents were asked if fishing on Lake Murray for striped bass had improved since the 5/21 regulation (to lower the creel limit from 10 fish per day to 5 fish per day, and to increase the minimum size to 21 inches) had been in place.

- 43% of respondents reported that fishing for striped bass on Lake Murray had improved (12% greatly and 31% somewhat) since the 5/21 was put in place, 13% reported it had declined (9% somewhat and 4% greatly), and 20% reported it had stayed the same. One-quarter of respondents had not fished on Lake Murray before the 5/21 went into effect.

Then respondents were asked if they perceived there to be more or less quality striped bass on Lake Murray since the 5/21 regulation went into effect.

- 38% of respondents reported that, since the 5/21 was put into effect, there were more **quality** striped bass (8% much more and 30% somewhat more) on Lake Murray. Twenty-

two percent reported there were less quality striped bass (14% somewhat and 8% much less), 19% reported the same, and 20% did not know.

Finally, in this section, respondents were asked if they perceived there to be more or less trophy striped bass on Lake Murray since the 5/21 regulation went into effect.

- 22% of respondents reported that, since the 5/21 was put into effect, there were more **trophy** striped bass (4% much more and 18% somewhat more) on Lake Murray. Thirty-four percent reported there were less trophy striped bass (21% somewhat and 13% much less), 18% reported there were the same numbers, and 27% did not know.

## **Definition of Keeper, Quality and Trophy Striped Bass**

In this section, respondents were asked about their perceptions of appropriate size and weight limits for 3 categories of striped bass - keepers, quality and trophy. First, they were asked to report the qualities of a striped bass worth keeping (keepers). (Multiple responses allowed)

- 84% of respondents stated size as the most important factor when defining a **striped bass worth keeping** and 21% reported weight to be a factor.

- For those respondents who reported size to be a factor when defining a striped bass worth keeping, 56% reported a size range of 20-23 inches as a 'keeper' size. Twenty-three percent reported keeper sizes of 16-19 inches, 14% reported sizes of 24-27 inches, 4% reported 12-15 inches, and 2% reported greater than 27 inches.

- Of the respondents who reported weight to be a factor when defining a striped bass worth keeping, 31% stated that 5-7 lb. fish were 'keepers', 19% stated 8-10 lb. fish, 14% stated greater than 16 lb. fish, 12% stated 2-4 lb. fish, 10% stated 14-16 lb. fish, 6% stated 11-13 lb. fish, and 10% did not know.

Respondents were asked about the characteristics of a quality striped bass. (Multiple responses allowed)

- 53% of respondents reported size to be a factor when defining a **quality striped bass**, 50% considered weight to be a factor and 6% did not know.

- Of the respondents that considered size to be a factor when defining a quality striped bass, 38% stated that 20-23 inch fish were quality fish, 33% stated 24-27 inch fish, 15% stated greater than 27 inch fish, 11% stated 16-19 inch fish, 2% stated 12-15 inch fish, and 2% did not know.

- Of the respondents that reported weight to be a factor when defining a quality striped bass, 31% stated 8-10 lb. fish were quality fish, 21% stated 5-7 lb. fish, 17% stated greater than 16 lb. fish, 16% stated 11-13 lb. fish, 10% stated 14-16 lb. fish, and 2% reported 2-4 lb. fish.

Respondents were asked about the qualities of a trophy striped bass. (Multiple responses allowed)

- 78% of respondents reported weight to be a factor when defining a **trophy striped bass**, 29% considered size to be a factor and 6% did not know.

- Of the respondents that reported weight to be a factor when defining a trophy striped bass, 31% stated 16-20 lb. fish were trophy bass, 25% stated 26-30 lb. fish, 17% stated greater than 30 lb. fish, 15% stated 21-25 lb. fish, 6% stated 11-15 lb. fish, and 4% reported 5-10 lb. fish.

- Of the respondents that considered size to be a factor when defining a trophy striped bass, 44% stated that 30-33 inch fish were trophy bass, 30% stated greater than 33-inch fish,

9% stated 22-25 inch fish, 7% stated 26-29 inch fish, 3% stated 18-21 inch fish, and 9% did not know.

## **Impact of Catch-and-Release Fishing on Lake Murray**

Striped bass anglers were asked several questions regarding catch-and-release fishing on Lake Murray. First, respondents were asked if catch-and-release of fish smaller than the size limit caused the death of the fish.

- 73% of respondents stated that the release of fish smaller than the size limit sometimes caused the death of the fish. Fourteen percent reported that the release of fish smaller than the limit rarely caused their death and 11% reported that it always caused their death.

Respondents were asked if they agreed or disagreed with the following statement. “Even if catch-and-release causes the death of some fish, is it acceptable in order to improve the striped bass fishery on Lake Murray?”

- 67% of respondents agreed (37% strongly and 30% somewhat) that even if catch-and-release caused the death of some fish, it was acceptable in order to improve the striped bass fishery on Lake Murray. Twenty-seven percent disagreed (13% somewhat and 14% strongly), 4% did not know, and 2% neither agreed nor disagreed.

Respondents were asked, “On Lake Murray, do you feel that catch-and-release fishing is more of a problem for the striped bass during some months than others?” (Multiple responses allowed)

- Respondents reported that catch-and-release in the summer months of June (28%), July (56%), and August (56%) was more of a problem for striped bass than in other months.
- Smaller percentages of striped bass anglers reported that catch-and-release was not a problem in any month of the year (19%) and that September was a problem month (14%). Fifteen percent did not know if it was a problem.

**Summer Catch-and-Release Management Options on Lake Murray**

Respondents were informed that there was some evidence of greater physical stress on the striped bass population during the summer months compared to other times of the year. They were then asked to select a management option that the South Carolina Department of Natural Resources could do to address this issue. Responses were ranked in order of importance.

- 51% of respondents wanted the South Carolina Department of Natural Resources to allow 2 of the 5 fish creel limit to be less than 21 inches in the summer months.
- 29% of respondents wanted the South Carolina Department of Natural Resources to reduce the length limit to 18 inches during the summer months.
- 8% of respondents wanted the South Carolina Department of Natural Resources to remove the length limit, allowing any fish to be caught in the summer.
- 4% of respondents wanted the South Carolina Department of Natural Resources to not allow any striped bass to be caught in the summer.

## **Compliance with Catch-and-Release Fishing Regulations**

In this section, respondents were asked if they always, sometimes, rarely or never released fish smaller than the legal size limit (less than 21 inches) on Lake Murray.

- 97% of respondents reported that they always released fish that were smaller than the legal size limit on Lake Murray, 2% sometimes released fish, and 1% never released fish that were under legal size.

### **Awareness of Catch-and-Release Publications**

Respondents were asked, “Are you aware of any of the South Carolina Department of Natural Resources’ publications regarding catch-and-release of striped bass and other sport fish species?”

- 63% of respondents were not aware of any South Carolina Department of Natural Resources’ publications regarding catch-and-release of striped bass and other sport fish species and 36% were aware.

## **Fishing Techniques Used on Lake Murray**

In this section, striped bass anglers were asked specific questions about their striped bass fishing techniques on Lake Murray.

First, striped bass anglers were asked how they handled fish smaller than the legal size limit to increase its chance for survival. (Multiple responses allowed) Responses were rank ordered by techniques used most often:

- Made the catch-and-release process as quick as possible (50%),
- Kept the fish in the water as much as possible (45%),
- Cut the line if hooked deeply (45%),
- Minimized the handling once the fish was reeled in (35%),
- Revived fish (30%),
- Used tools to remove hooks, including the use of gloves (26%),
- Played and landed the fish quickly (18%), and
- Used artificial lures (17%).

In the next question, striped bass anglers reported what kinds of techniques/baits they used most often while fishing for striped bass on Lake Murray. (Multiple responses allowed)

- 81% of respondents used straight-lining live or cut bait, 24% used trolling/down-lining with riggers, and 17% cast artificial lures while fishing for striped bass on Lake Murray.

Respondents were asked several questions about using circle hooks while fishing for striped bass on Lake Murray. First, they were asked if they had used circle hooks during the summer months, and then they were asked about their level of satisfaction with using the circle hooks.

- 64% of respondents reported that they did not regularly use circle hooks during the summer months, while fishing for striped bass on Lake Murray, 28% reported they did, and 8% did not know.
- 90% of those respondents who regularly used circle hooks were satisfied (54% very and 36% somewhat) with their experiences, 7% were neither satisfied nor dissatisfied, and 3% were somewhat dissatisfied.
- Respondents cited several reasons for their satisfaction with using circle hooks while fishing for striped bass on Lake Murray (multiple responses allowed): Easier on the fish after release/greater chance for survival (58%), able to catch more fish (36%), and easier to use in general (32%).

### **Area, Depth and Days Fished on Lake Murray**

Respondents were asked in what regions of Lake Murray they normally fished for striped bass during the summer. (Multiple responses allowed) In rank order of area most often fished:

- 80% of respondents fished between the dam and Spence Islands,
- 20% fished from Spence Islands to Shull Island and the mouth of Bear Creek,
- 12% fished from Shull Island and the mouth of Bear Creek to the Gap,
- 6% fished from the Gap to the confluence of Saluda and Little Saluda Rivers (River Bend),
- 4% fished up either river, and
- 4% did not know where they fished.

Respondents were then asked at what depth they most often caught fish during the summer months on Lake Murray.

- 58% of striped bass anglers reported most often catching fish during the summer on Lake Murray at depths of 30-59 feet below the surface, 22% reported depths of 60-89 feet and 12% reported depths of less than 29 feet below the surface. Five percent did not know the depth, and 2% reported catching bass at depths of 90-119 feet below the surface.

Finally in this section, respondents were asked the number of days they had fished for striped bass from January 1, 1999 to December 1, 1999 on Lake Murray, and if the number of days they had fished had changed since the 5/21 regulation went into effect.

- 32% of respondents fished less than 11 days on Lake Murray from January 1, 1999 to December 1, 1999, 21% fished 11-20 days, 16% fished 21-30 days, 15% fished 31-40 days, 9% fished 41-50 days and 5% fished 51-200 days.
- 56% of respondents reported that since the 5/21 was put into effect, the number of days per year they fished for striped bass on Lake Murray had stayed the same, 24% reported an increase, and 9% reported a decrease. Twelve percent did not know.

### **Striped Bass Fishing Club Membership or Affiliation**

Respondents were asked if they belonged to or were affiliated with any striped bass fishing club or organization. (Multiple responses allowed)

- 93% of respondents did not belong to or were not affiliated with any striped bass fishing clubs or organizations. Two percent belonged to the Midlands Striper Club and 2% belonged to the Striper Kings of Greenville.

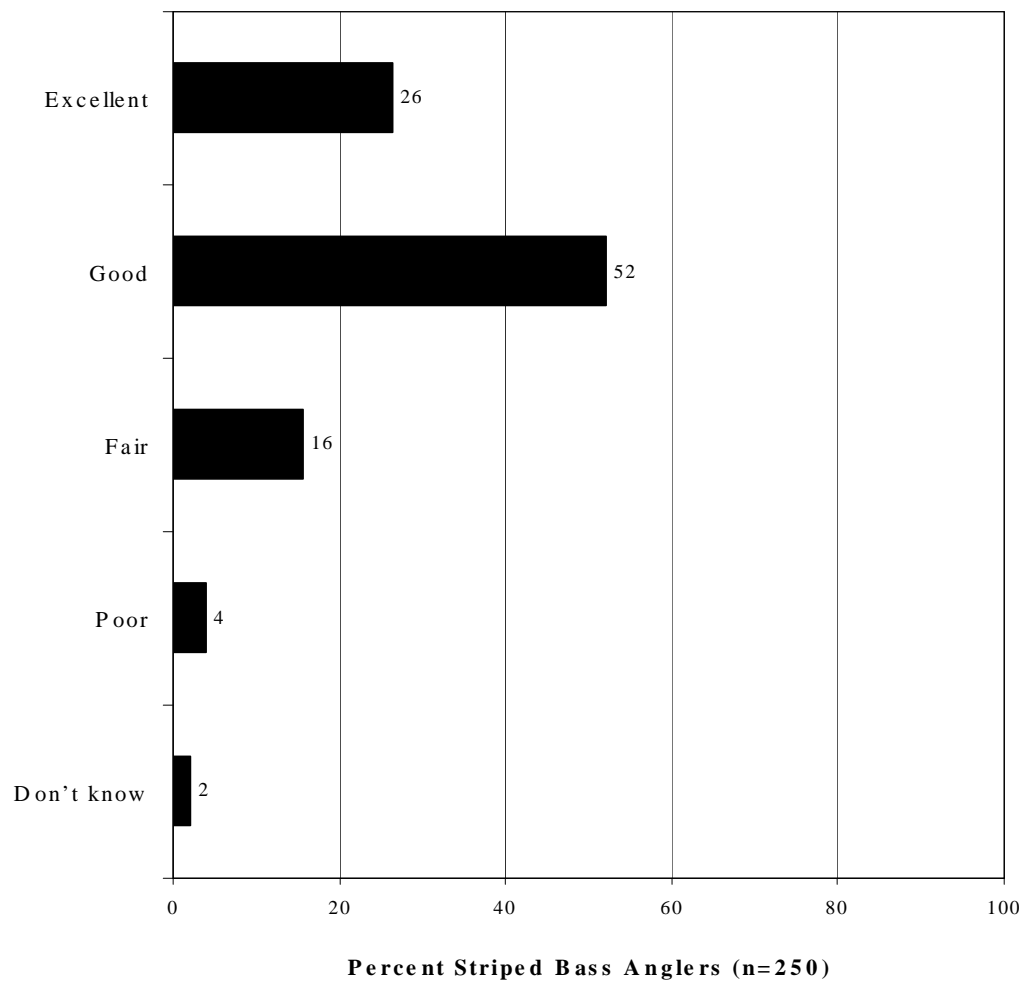
## **Other Issues**

- 43% of respondents said that they were sometimes checked by South Carolina

Department of Natural Resources law enforcement officers for undersized fish, or being over the limit for striped bass. Twenty-nine percent reported they were rarely checked, 22% reported they were never checked, and 4% reported that they were always checked.

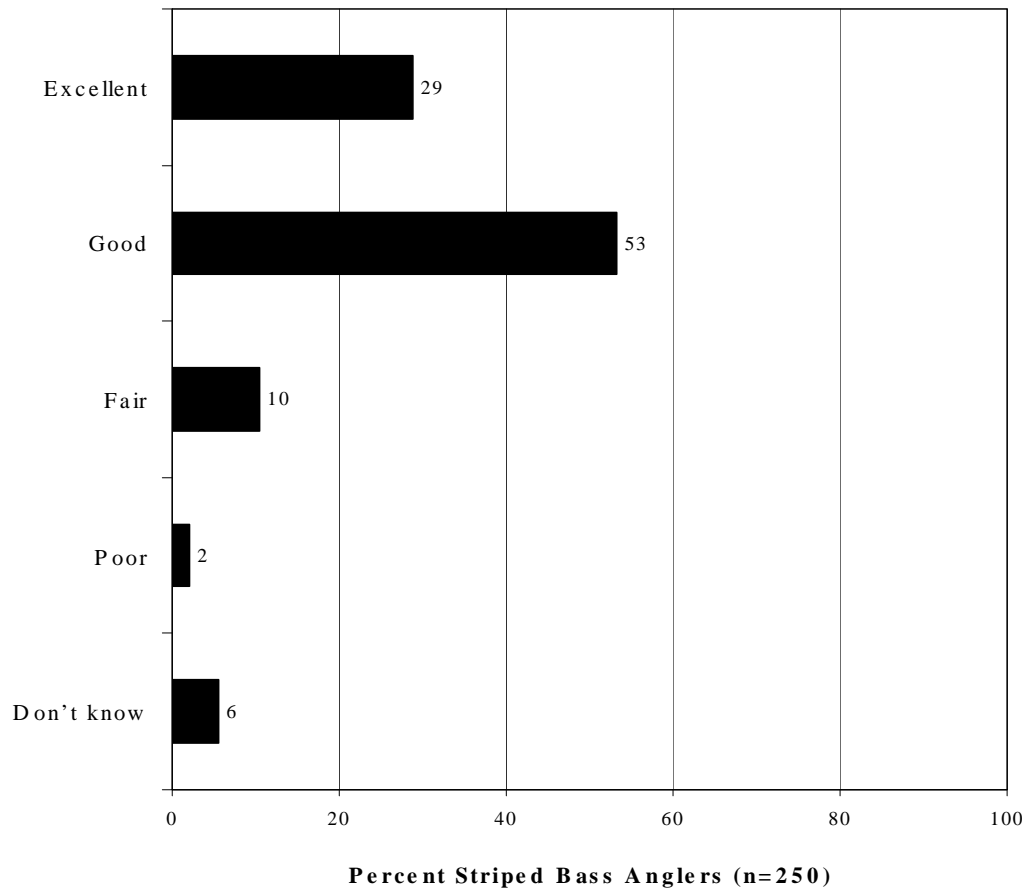
## **Graphs**

**Q5. In general, how would you rate the quality of the striped bass fishery on Lake Murray? Would you say it is... ?**



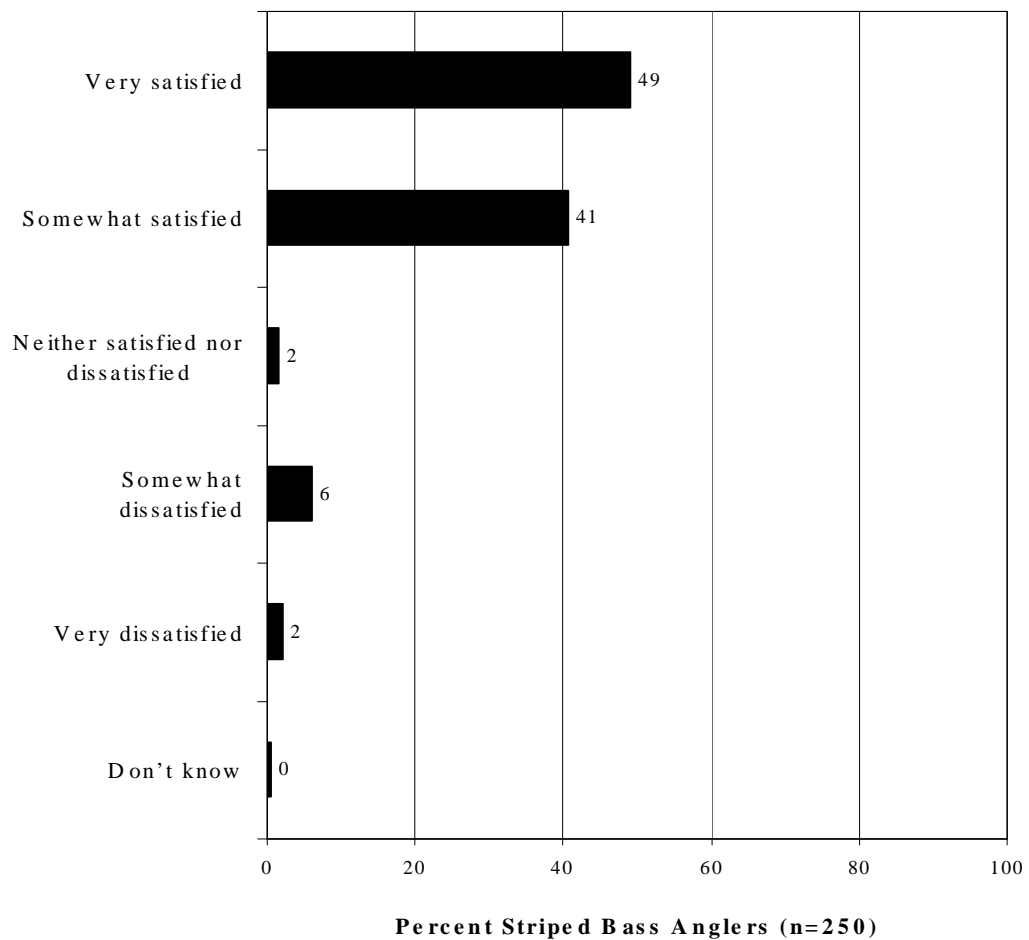


**Q6. Overall, do you think the Fisheries Section of the South Carolina Department of Natural Resources does an excellent, good, fair or poor job with respect to the striped bass fishery on Lake Murray, or do you not know?**



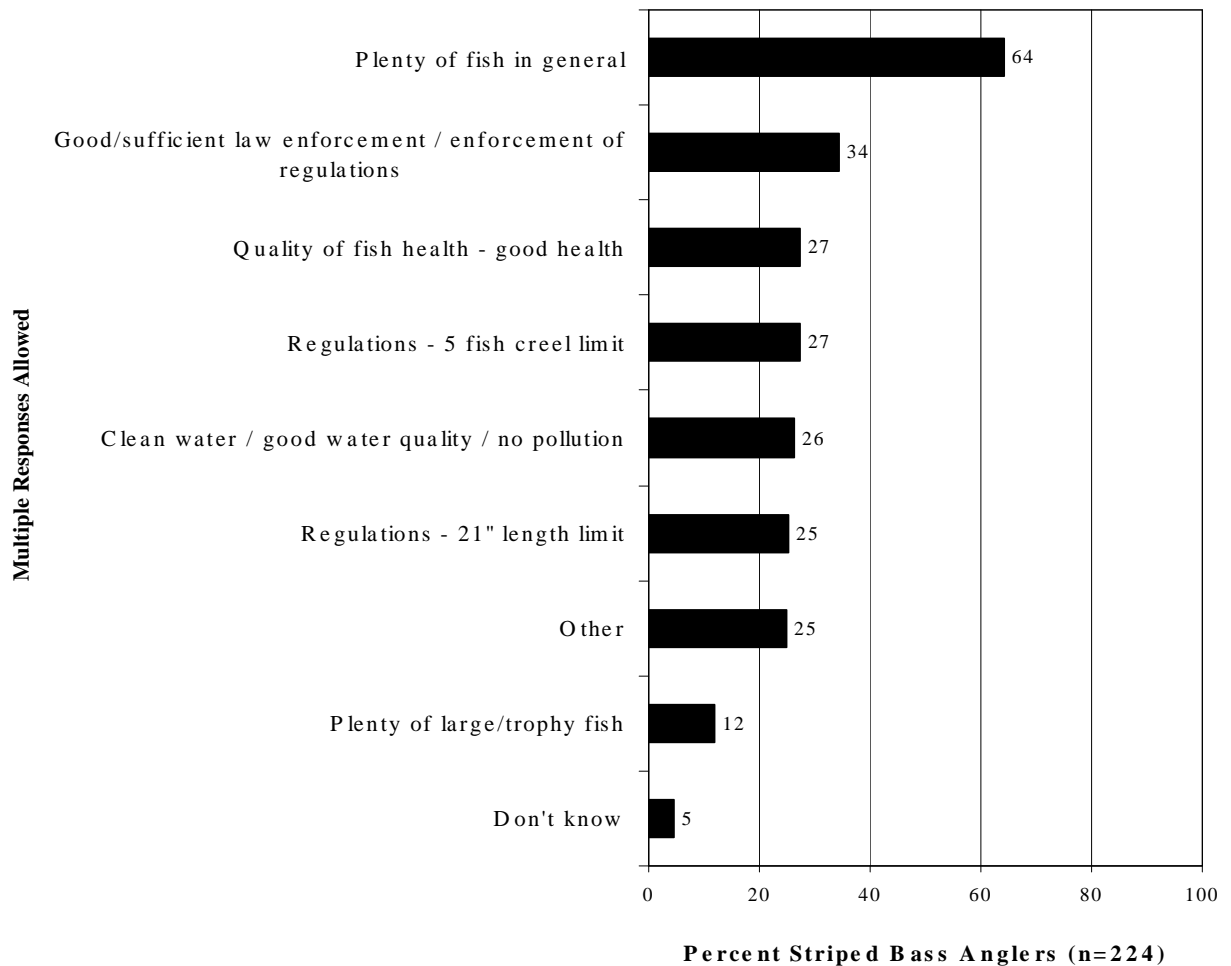


**Q7. Overall, would you say that you are satisfied or dissatisfied with the Department of Natural Resources' management of striped bass on Lake Murray?**



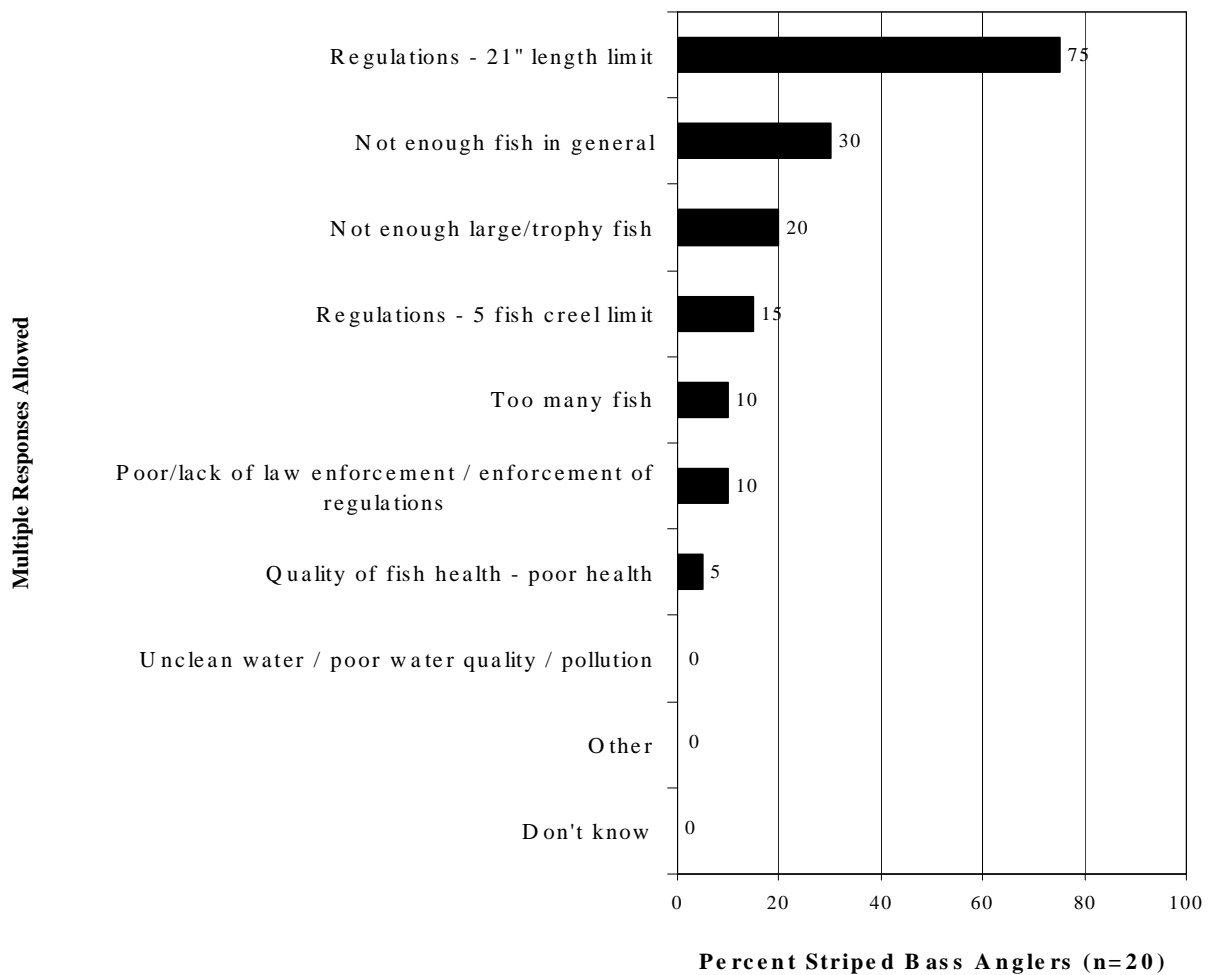


**Q9. What are the main reasons that you are satisfied with the Department's management of striped bass on Lake Murray?**  
**(Percent of striped bass anglers that are very or somewhat satisfied)**



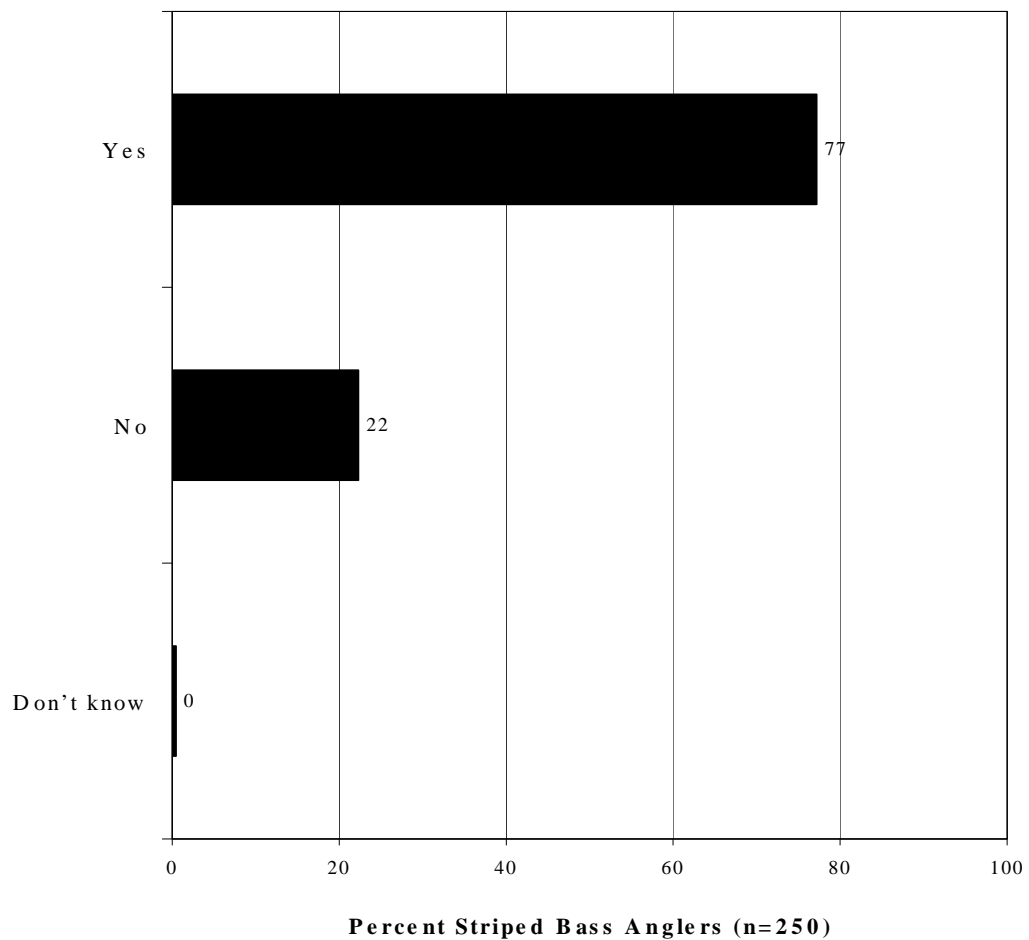


**Q 12. What are the main reasons that you are dissatisfied with the Department's management of striped bass on Lake Murray?**  
**(Percent of striped bass anglers that are very or somewhat dissatisfied)**



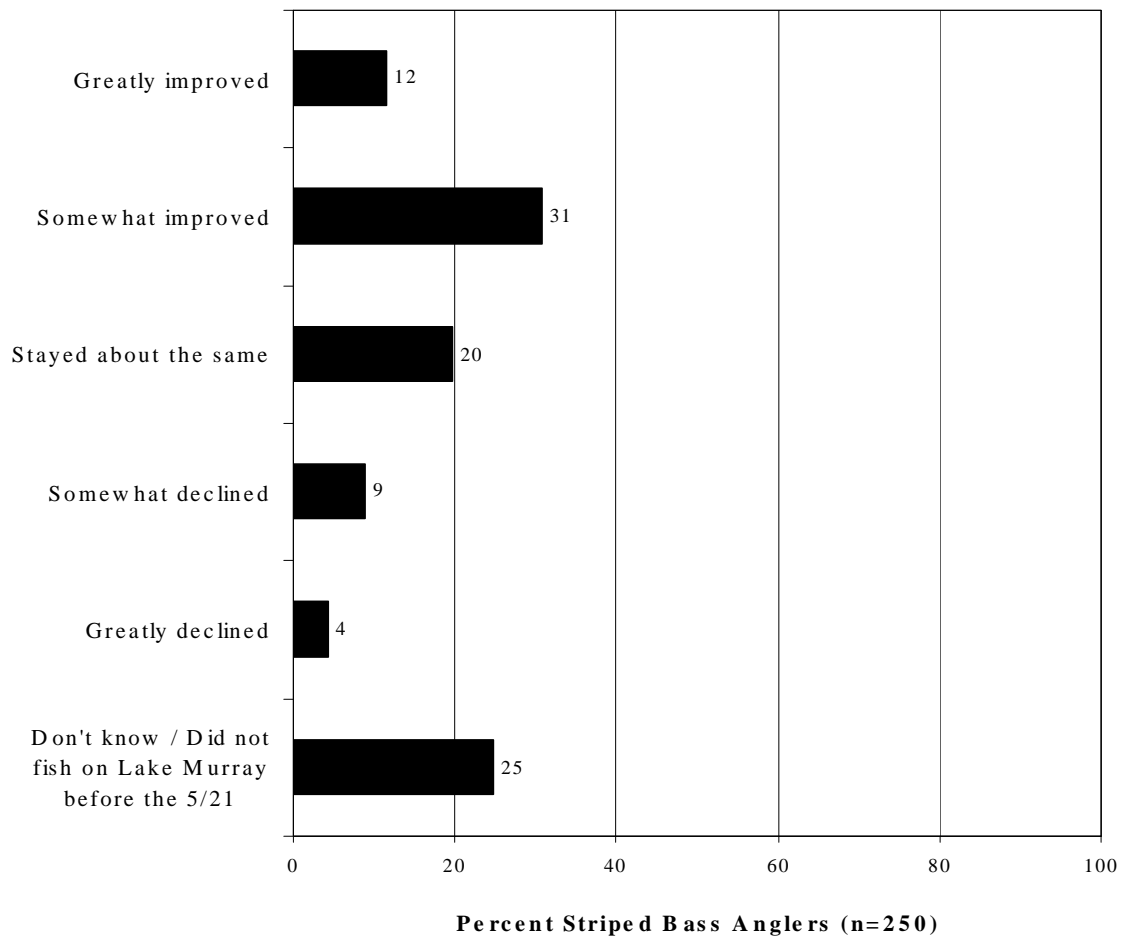


**Q 14. Before this survey, were you aware that Lake Murray is a put-grow-and-take fishery, that is, it is maintained by yearly stockings of 1" fish that are allowed to grow until reaching the size limit?**



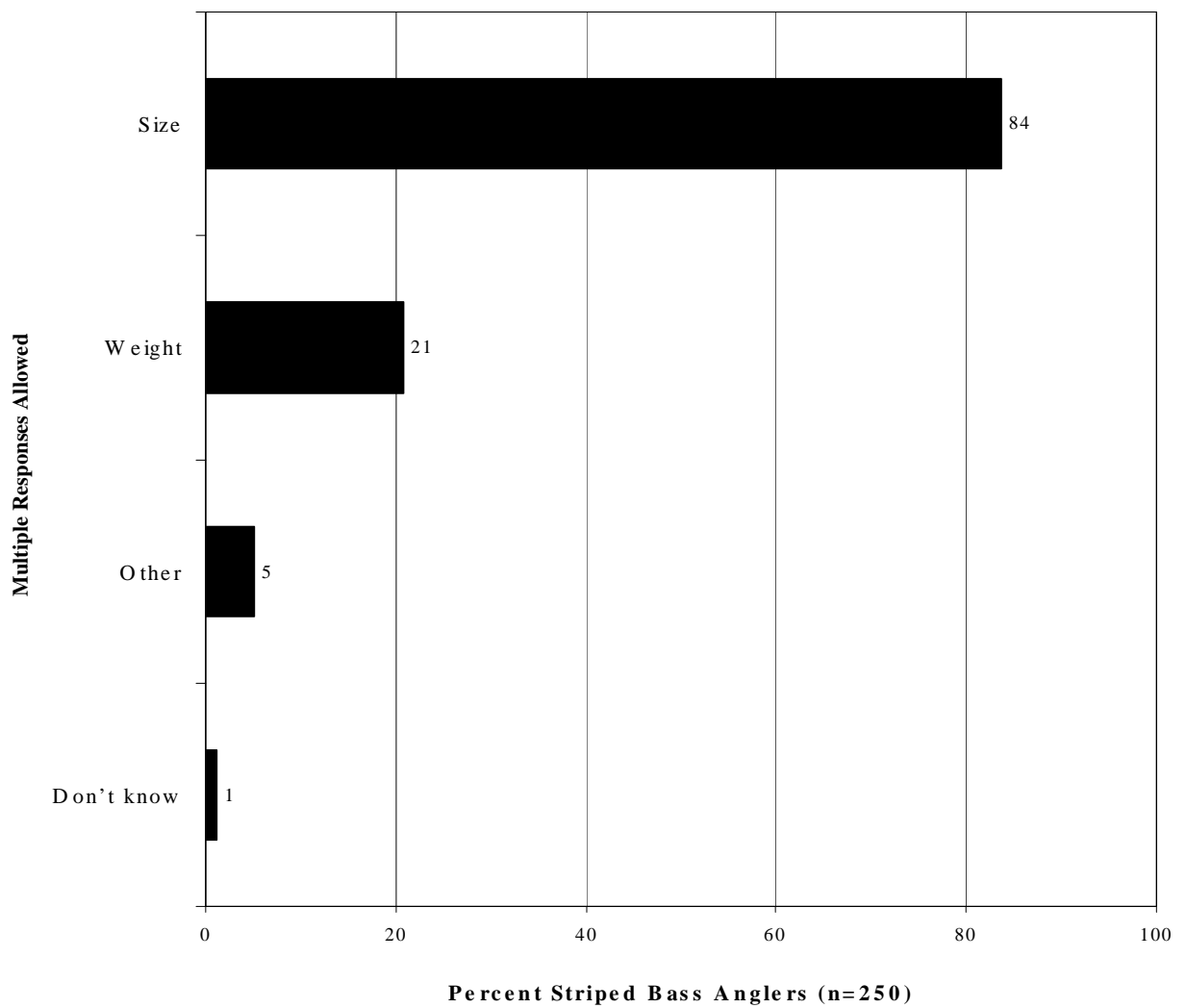


**Q15. Since the 5/21 was put into place, do you think that fishing for striped bass on Lake Murray has improved, stayed about the same, or declined?**



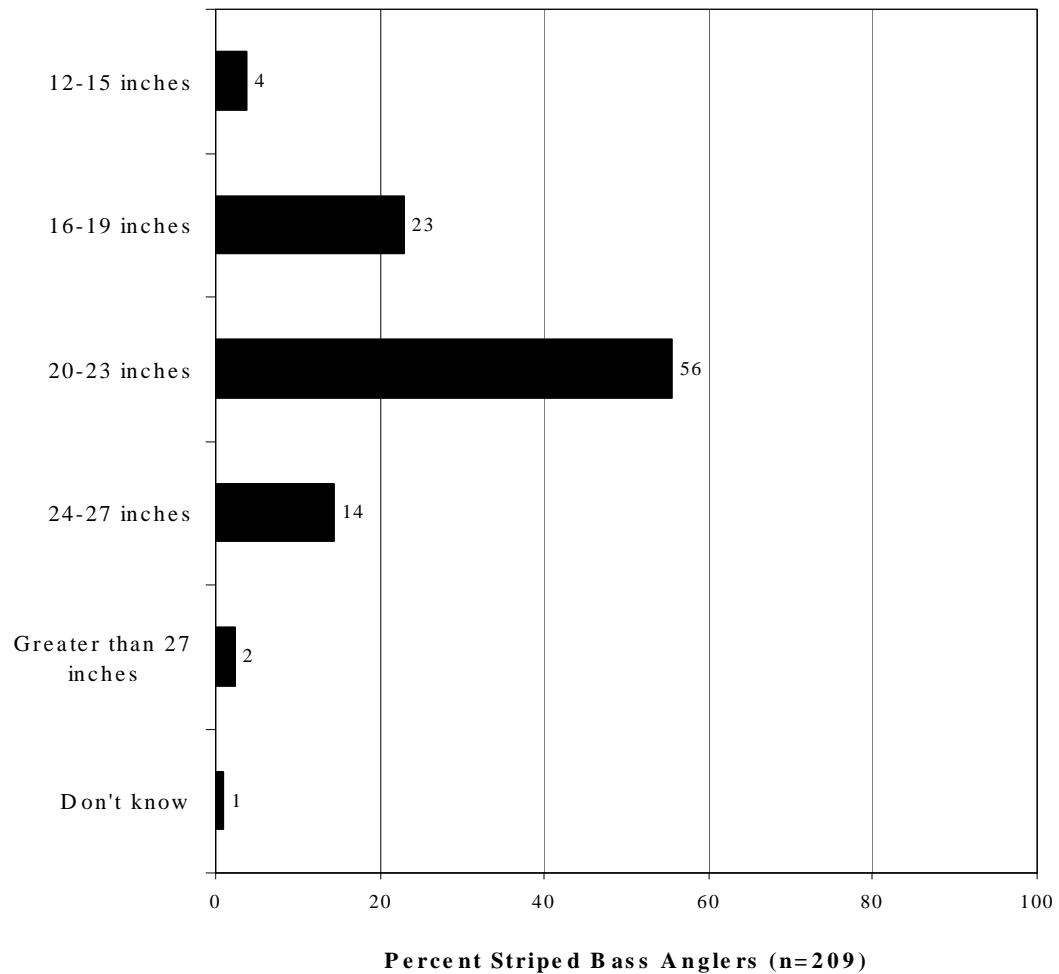


**Q17. What do you consider to be a striped bass worth keeping?**



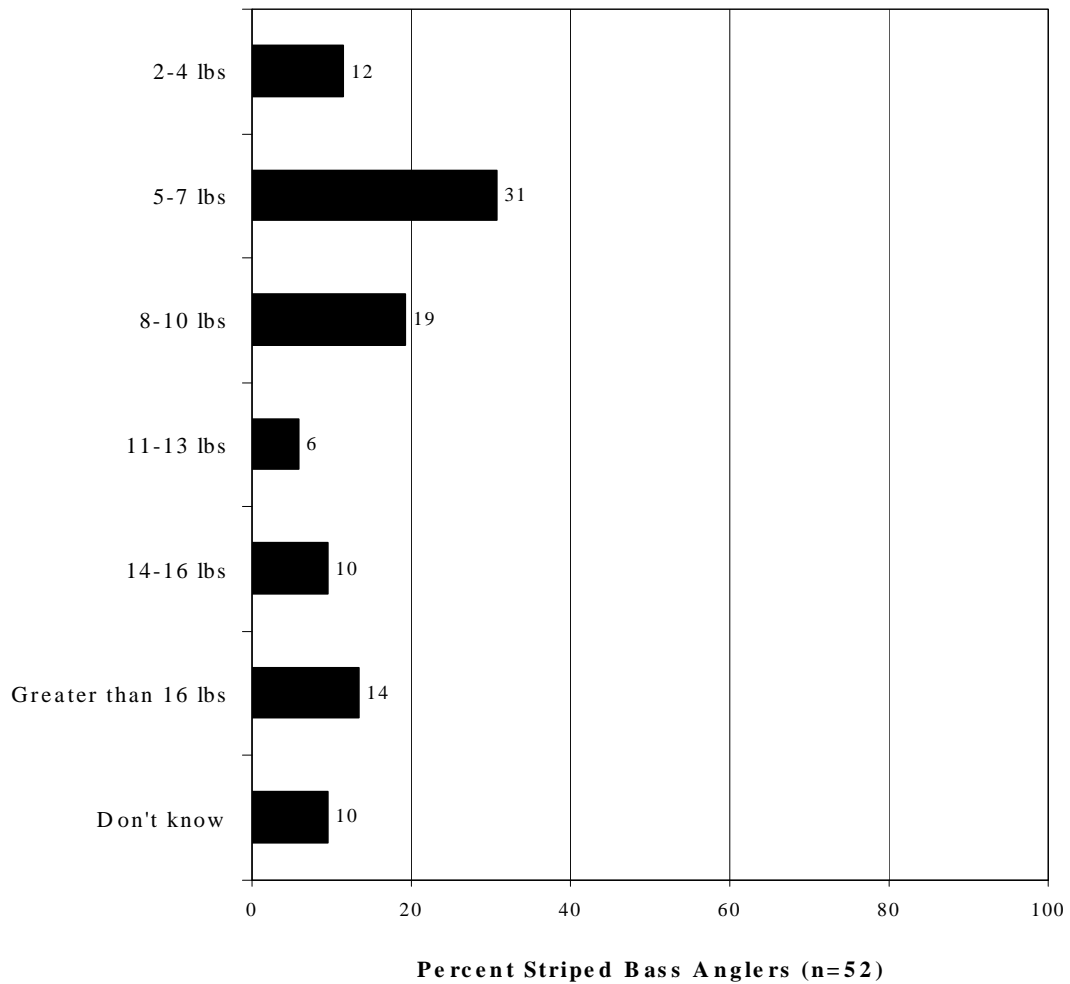


**Q 19. Lengths cited for striped bass worth keeping.  
(Percent of striped bass anglers that considered  
size when keeping a striped bass)**



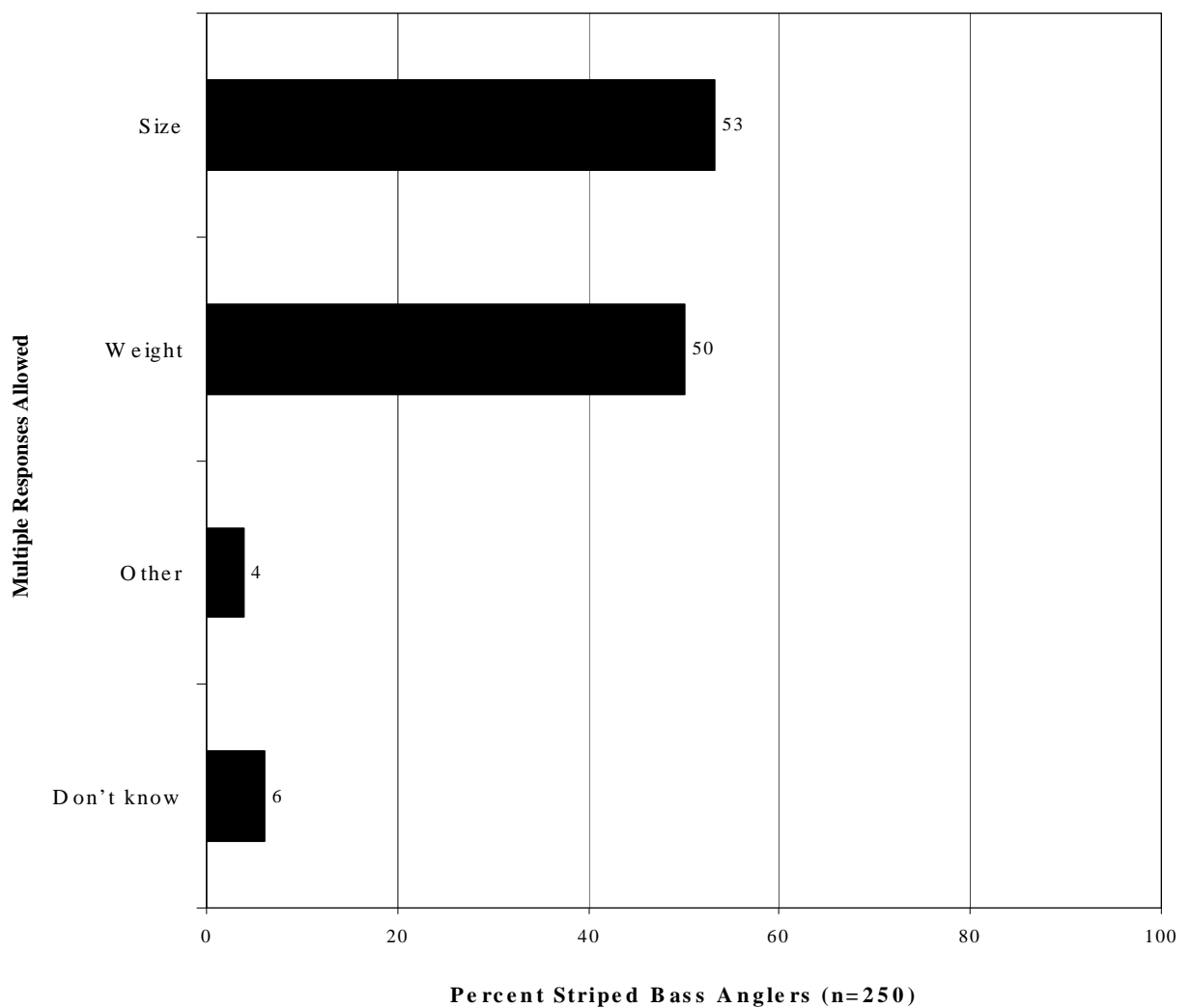


**Q 20. Weights cited for striped bass worth keeping.  
(Percent of striped bass anglers that considered  
weight when keeping a striped bass)**



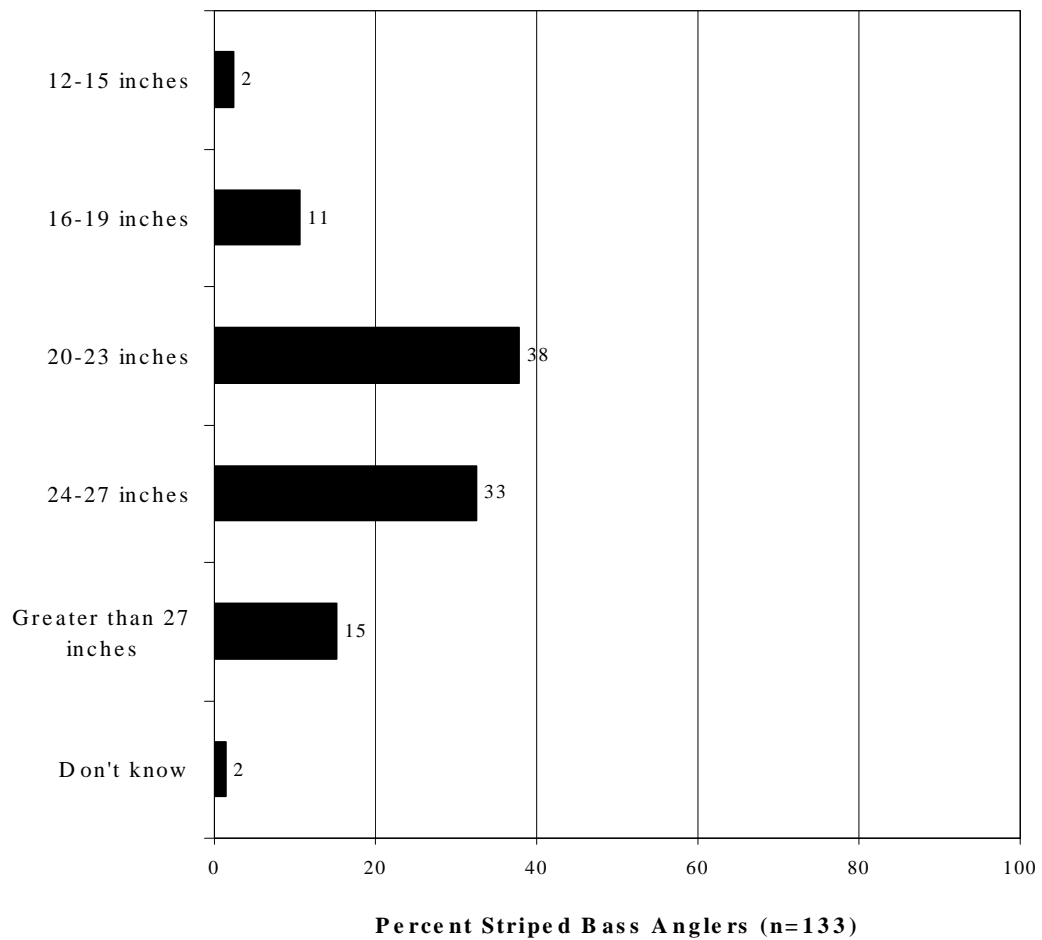


**Q22. What do you consider to be a quality striped bass?**



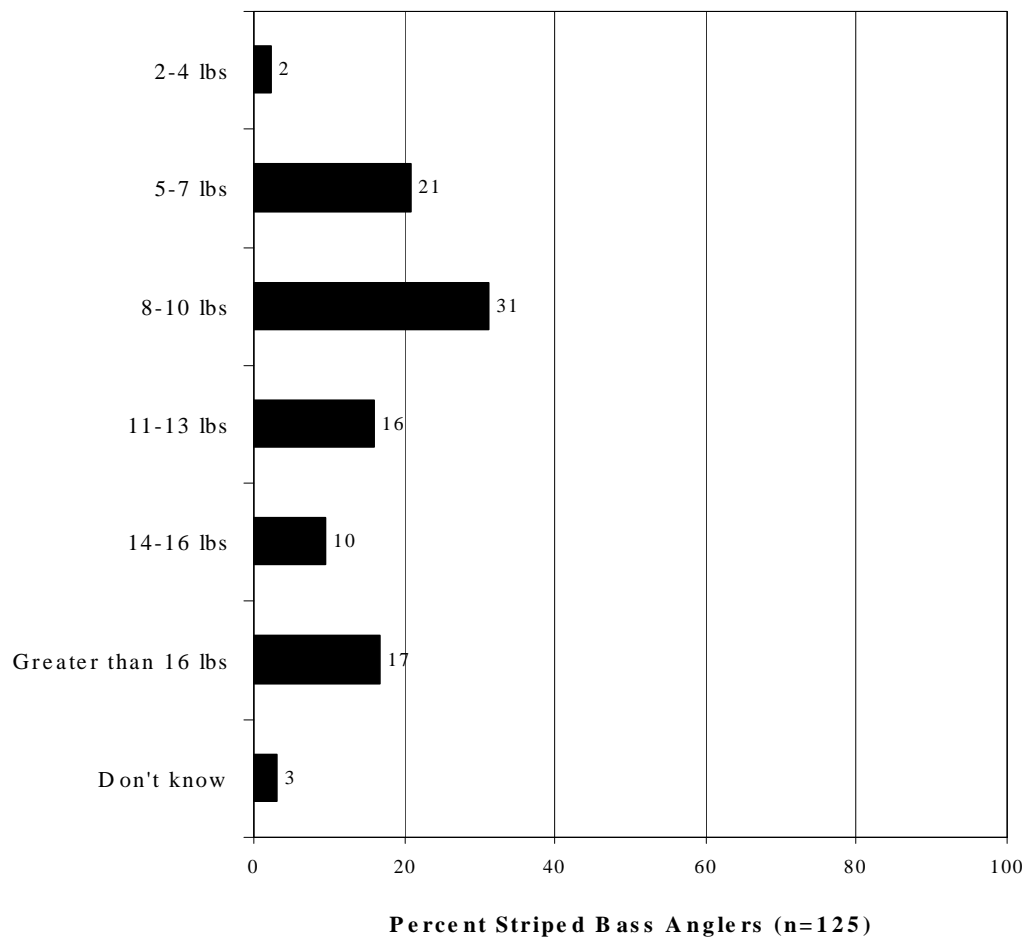


**Q24. Lengths cited for quality striped bass.  
(Percent of striped bass anglers that considered  
size for a quality striped bass)**



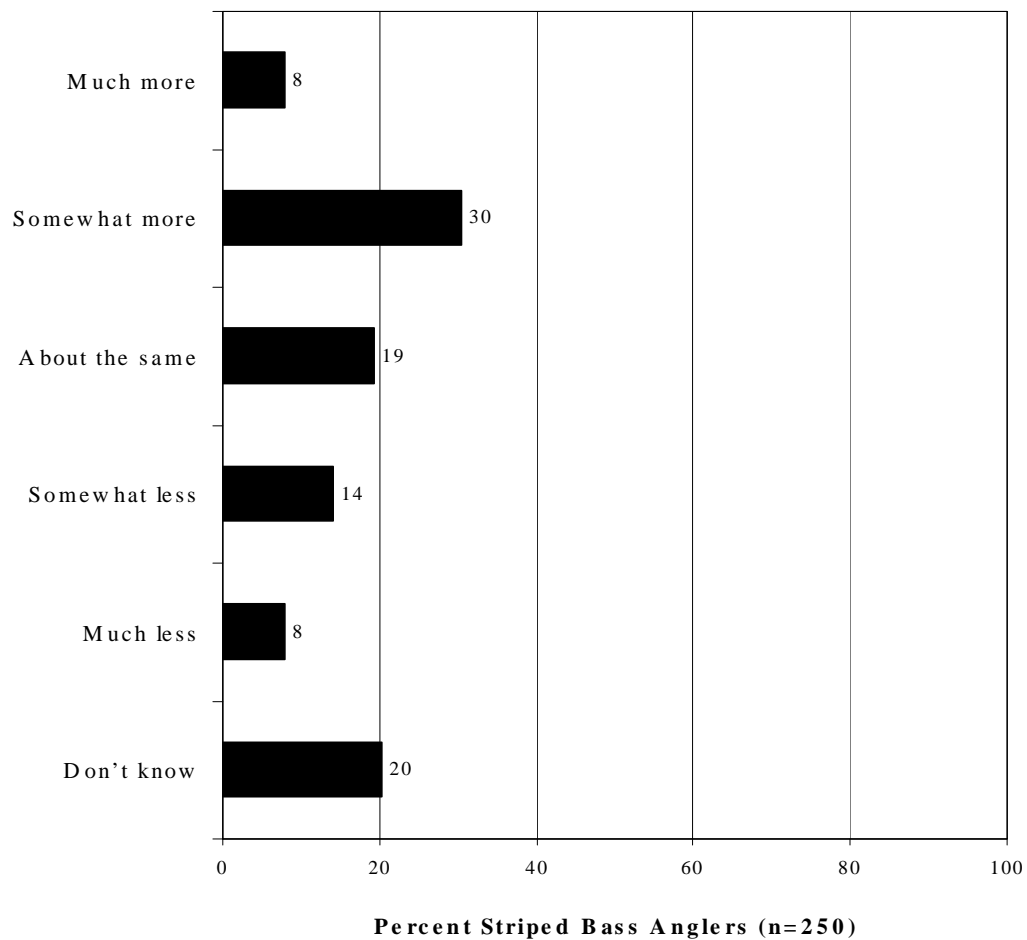


**Q25. Weights cited for quality striped bass.  
(Percent of striped bass anglers that considered  
weight for a quality striped bass)**



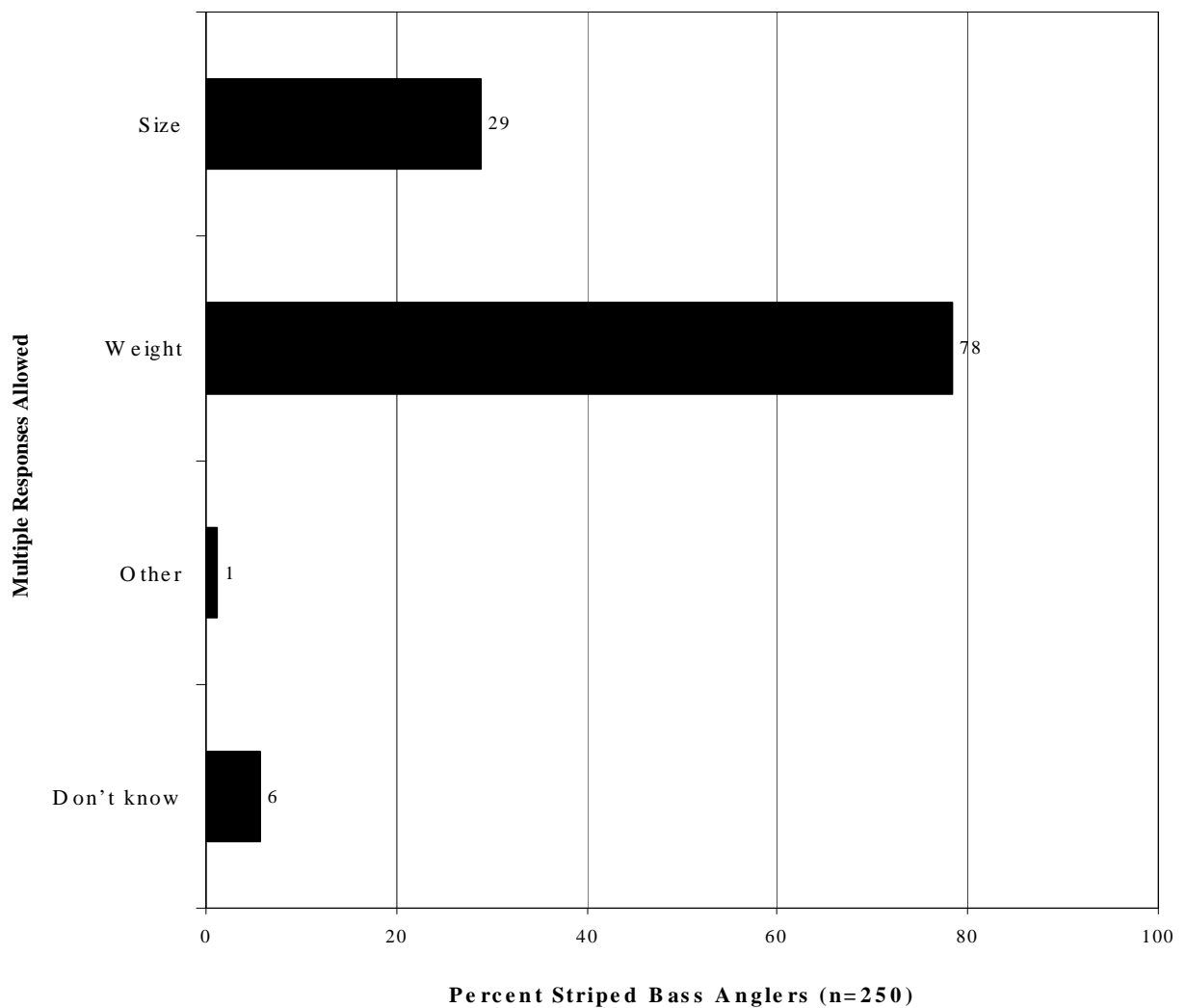


**Q26. Since the 5/21 was put into effect, do you think there are more, about the same number, or less quality striped bass, as you perceive it, on Lake Murray?**



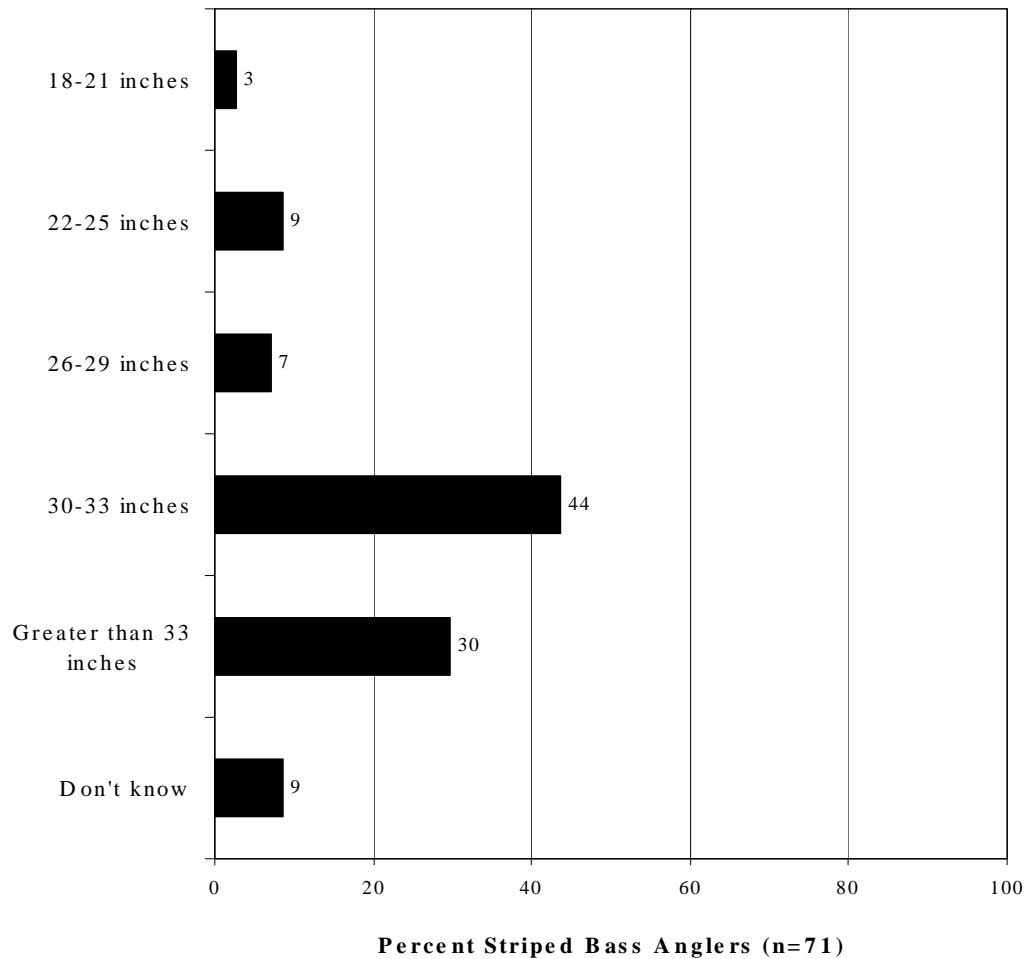


**Q28. What do you consider to be a trophy striped bass?**



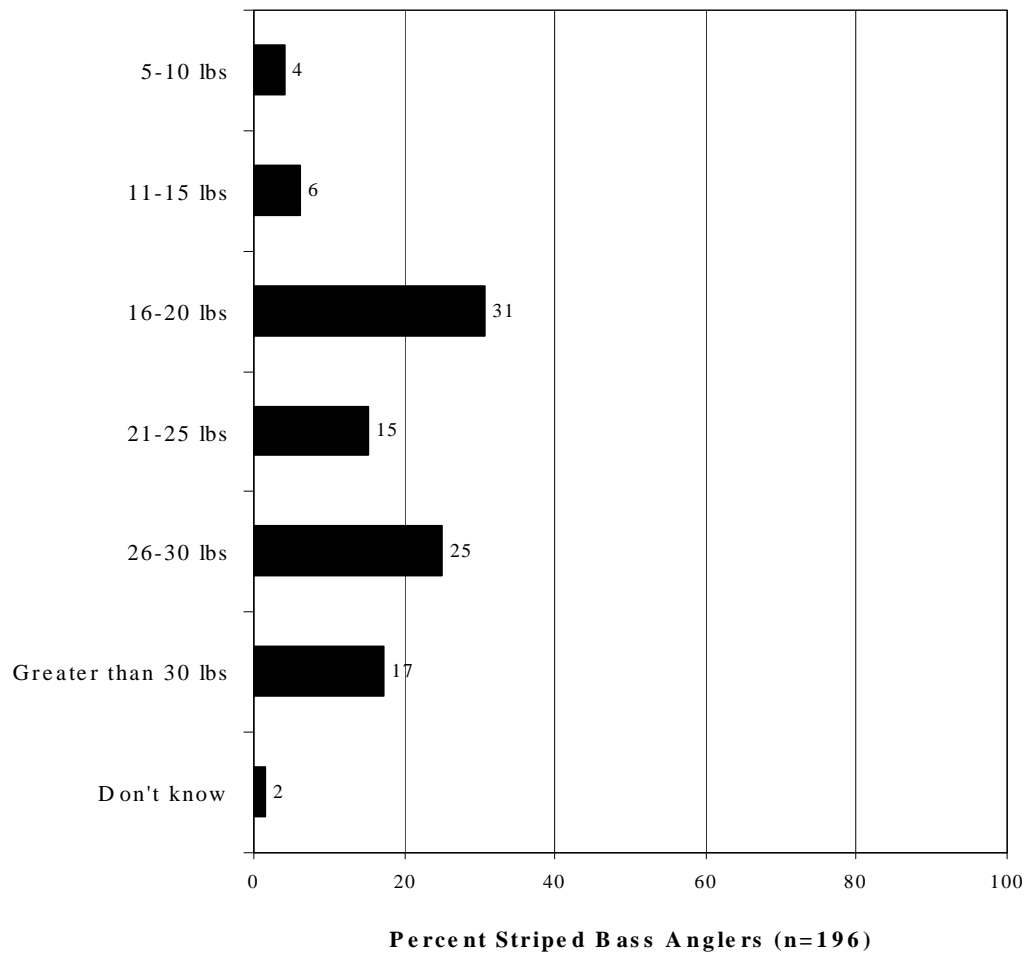


**Q30. Lengths cited for trophy striped bass.  
(Percent of striped bass anglers that considered  
size for a trophy striped bass)**



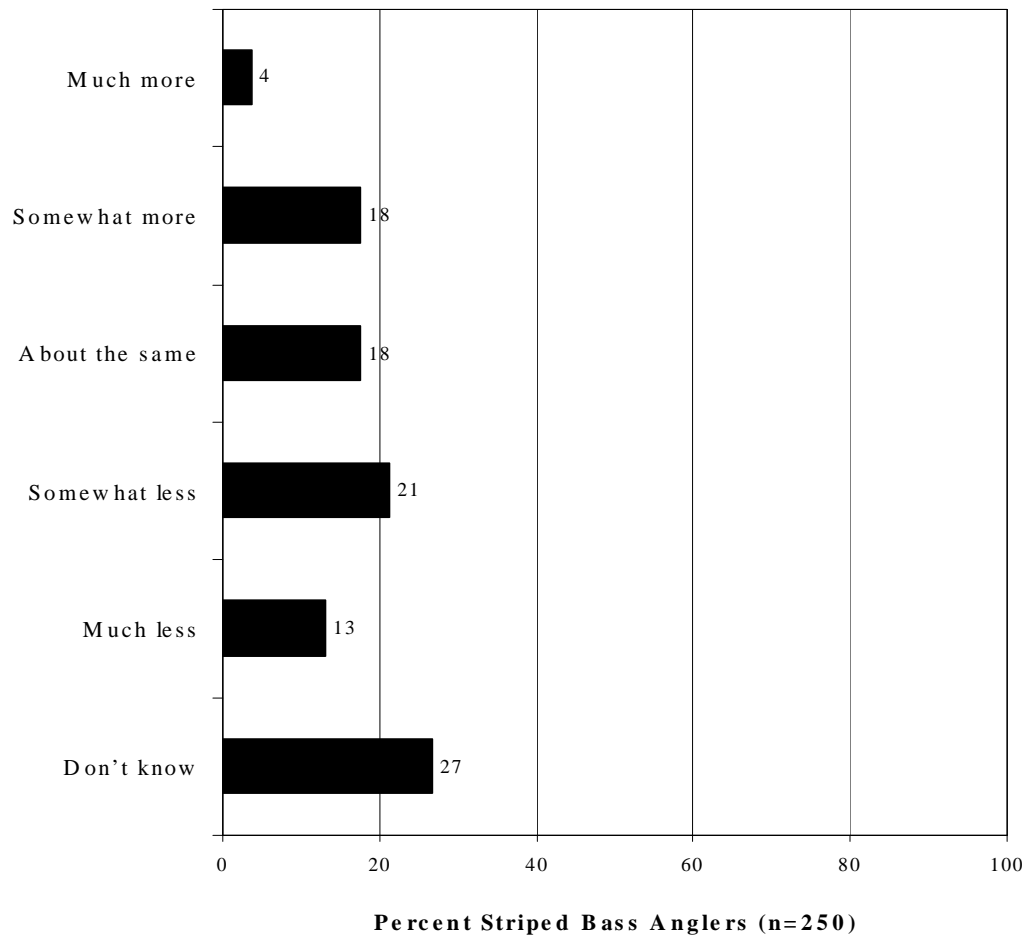


**Q31. Weights cited for trophy striped bass.  
(Percent of striped bass anglers that considered  
weight for a quality striped bass)**



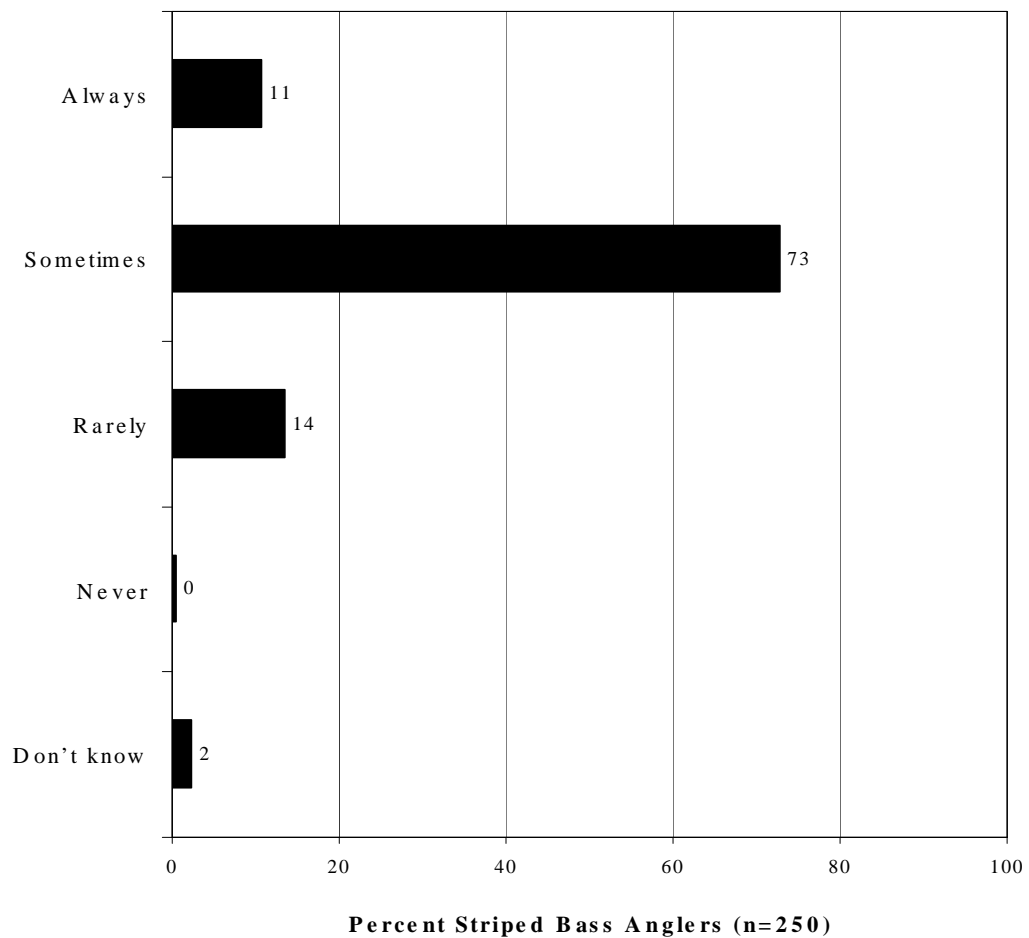


**Q32. Since the 5/21 was put into effect, do you think there are more, about the same number, or less trophy striped bass, as you perceive it, on Lake Murray?**



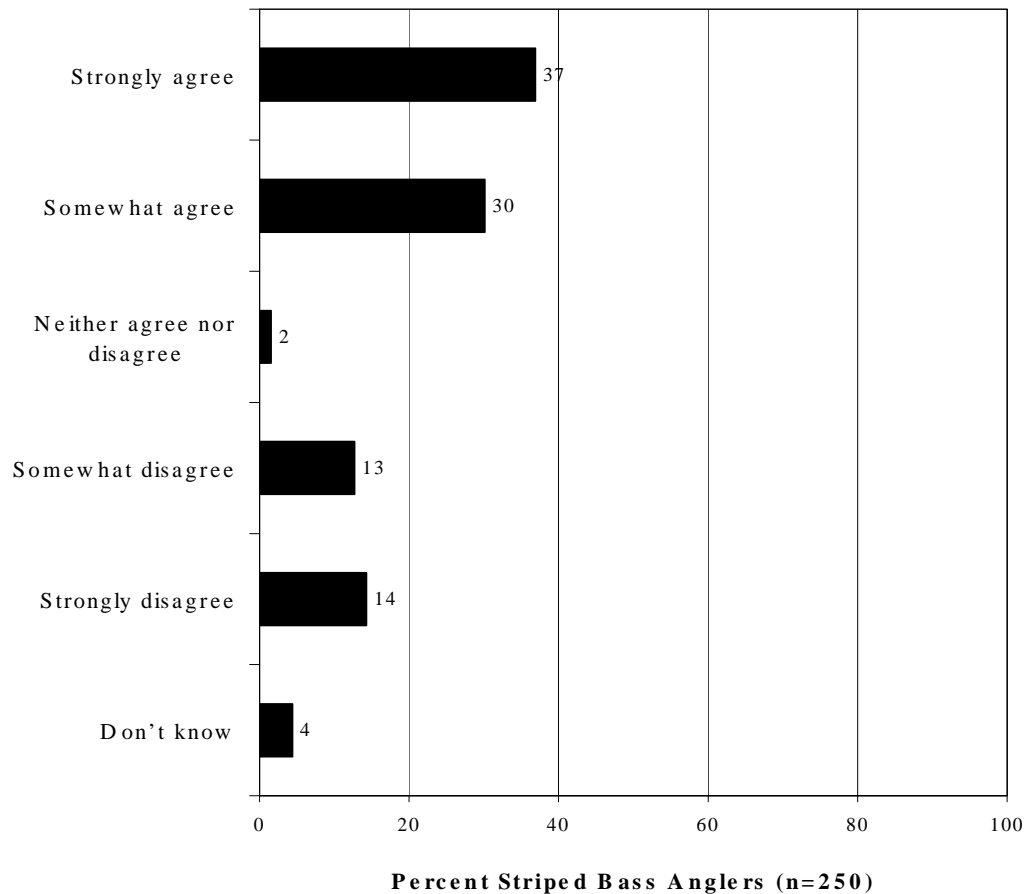


**Q33. First, do you feel that the release of fish that are smaller than the size limit causes the death of the fish always, sometimes, rarely, never or do you not know?**



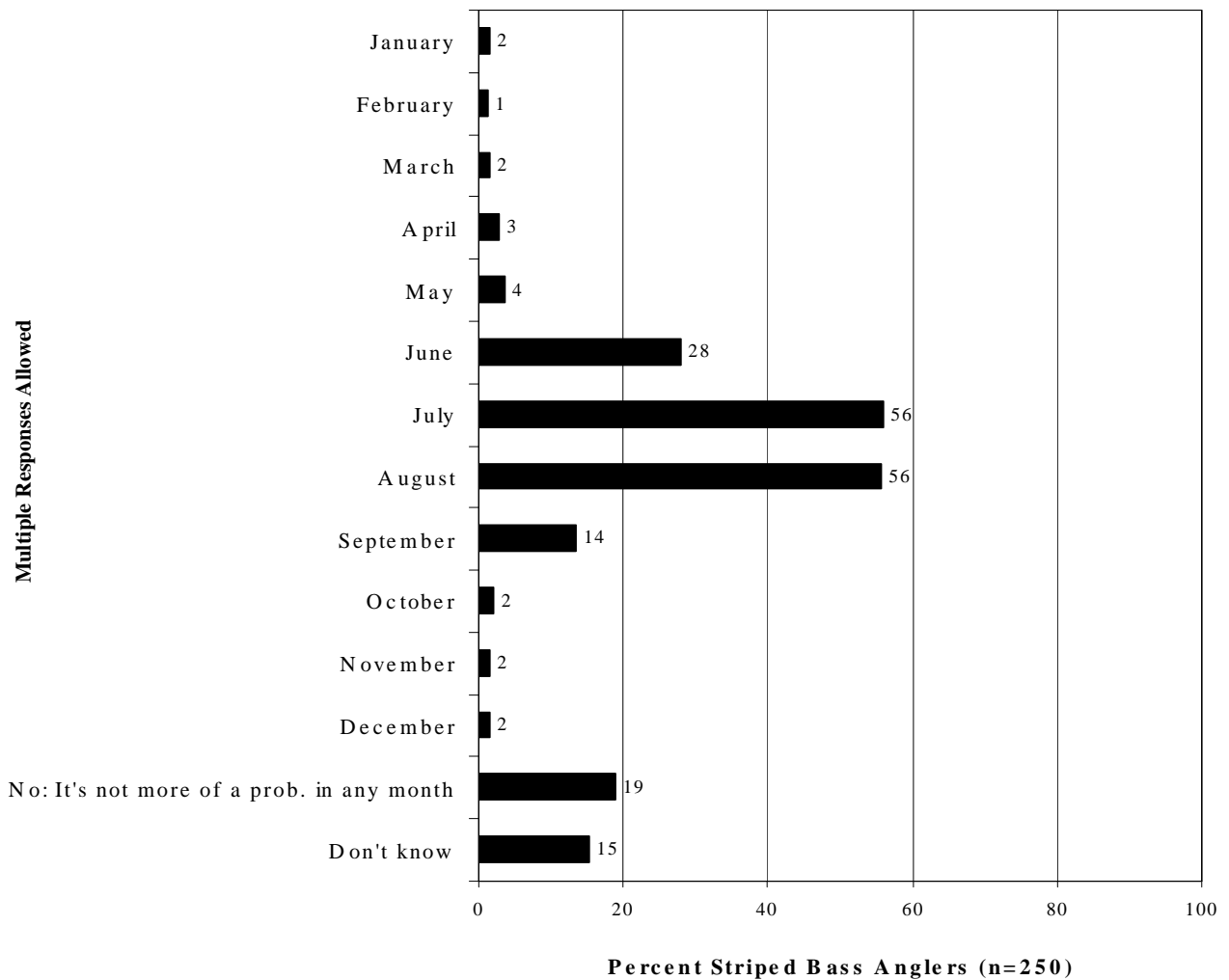


**Q34. And do you agree or disagree with the following statement? Even if catch-and-release causes the death of some fish, it is acceptable in order to improve the striped bass fishery on Lake Murray?**



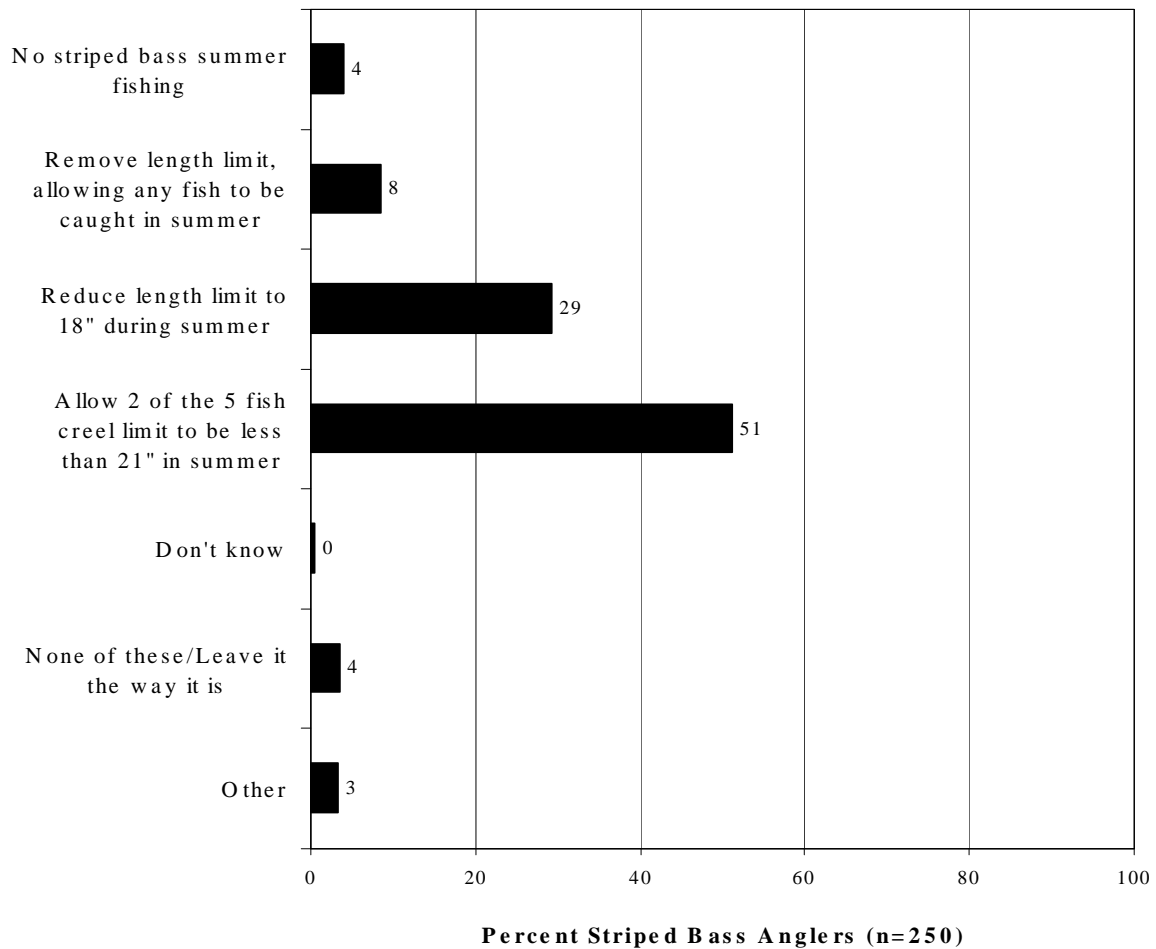


**Q 36. On Lake Murray, do you feel that catch-and-release fishing is more of a problem for the striped bass during some months than others?**



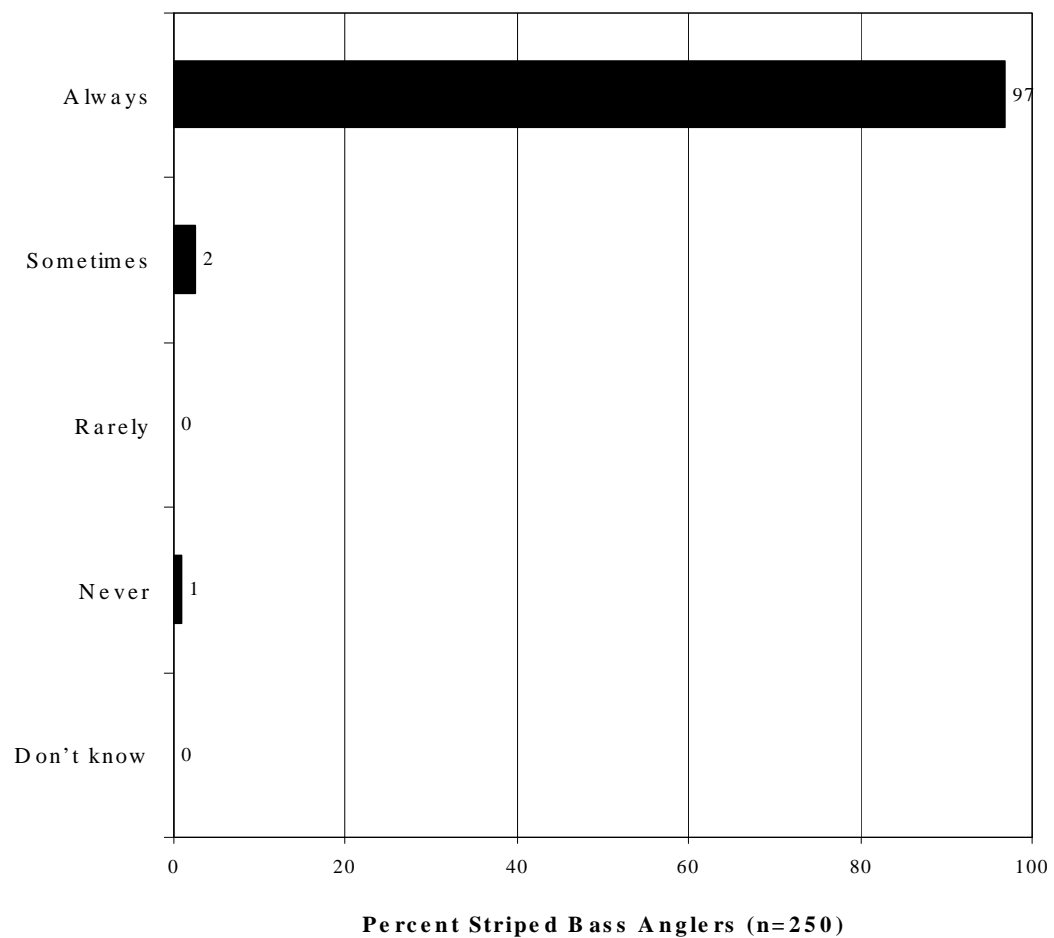


**Q43. Which one of those management options would you choose?**



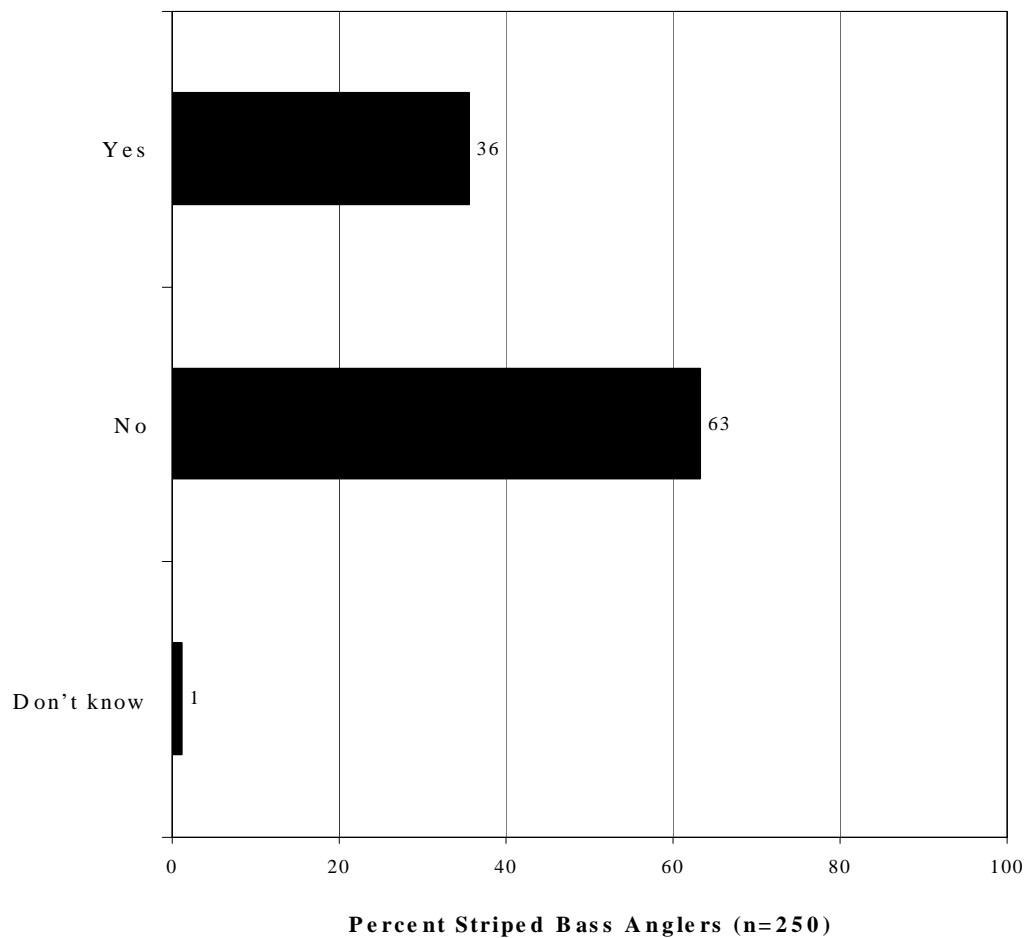


**Q45. When you catch a fish that is smaller than the legal size limit, on Lake Murray, would you say you release it... ?**



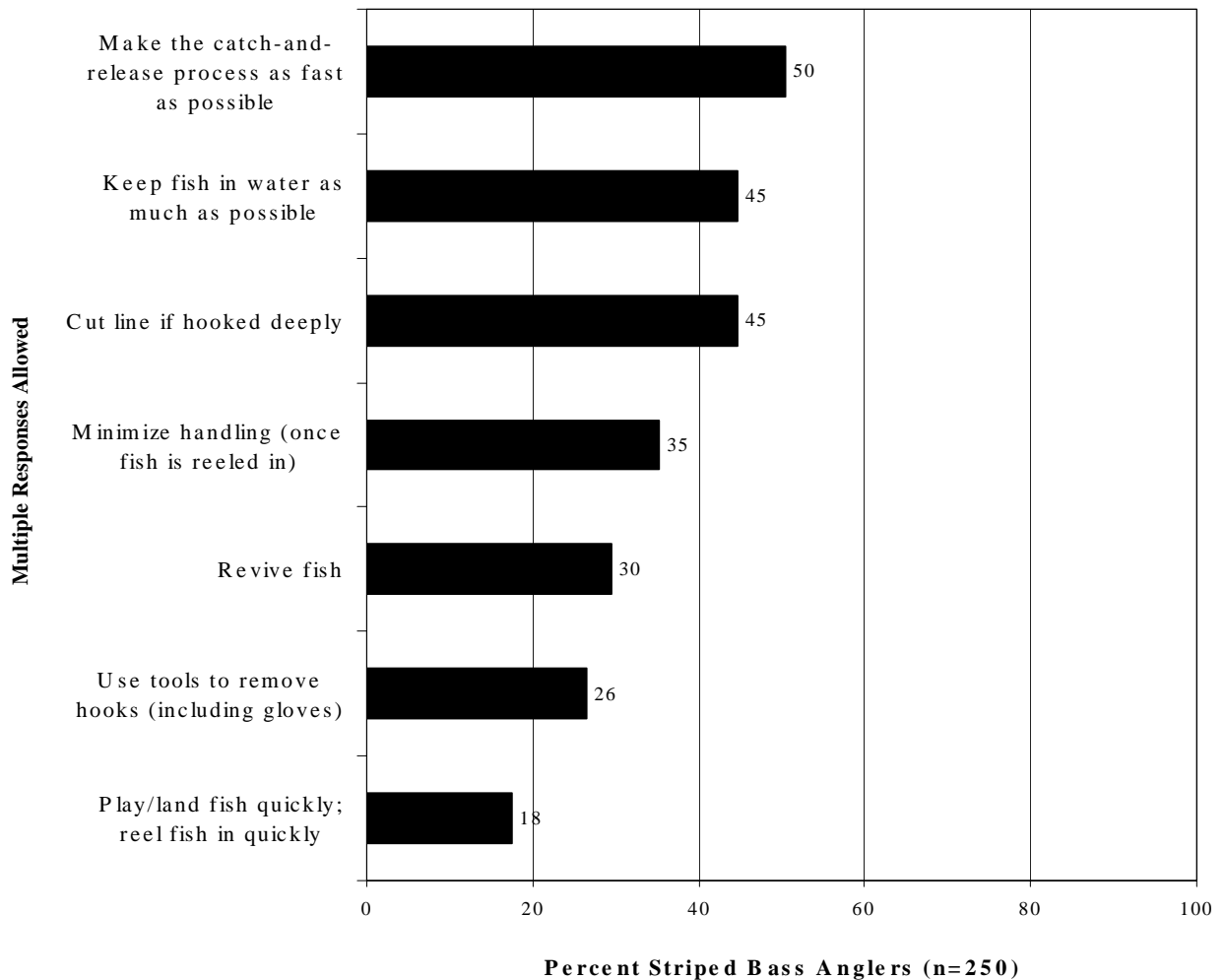


**Q46. Are you aware of any of the South Carolina Department of Natural Resources' publications regarding catch-and-release of striped bass and other sport fish species?**



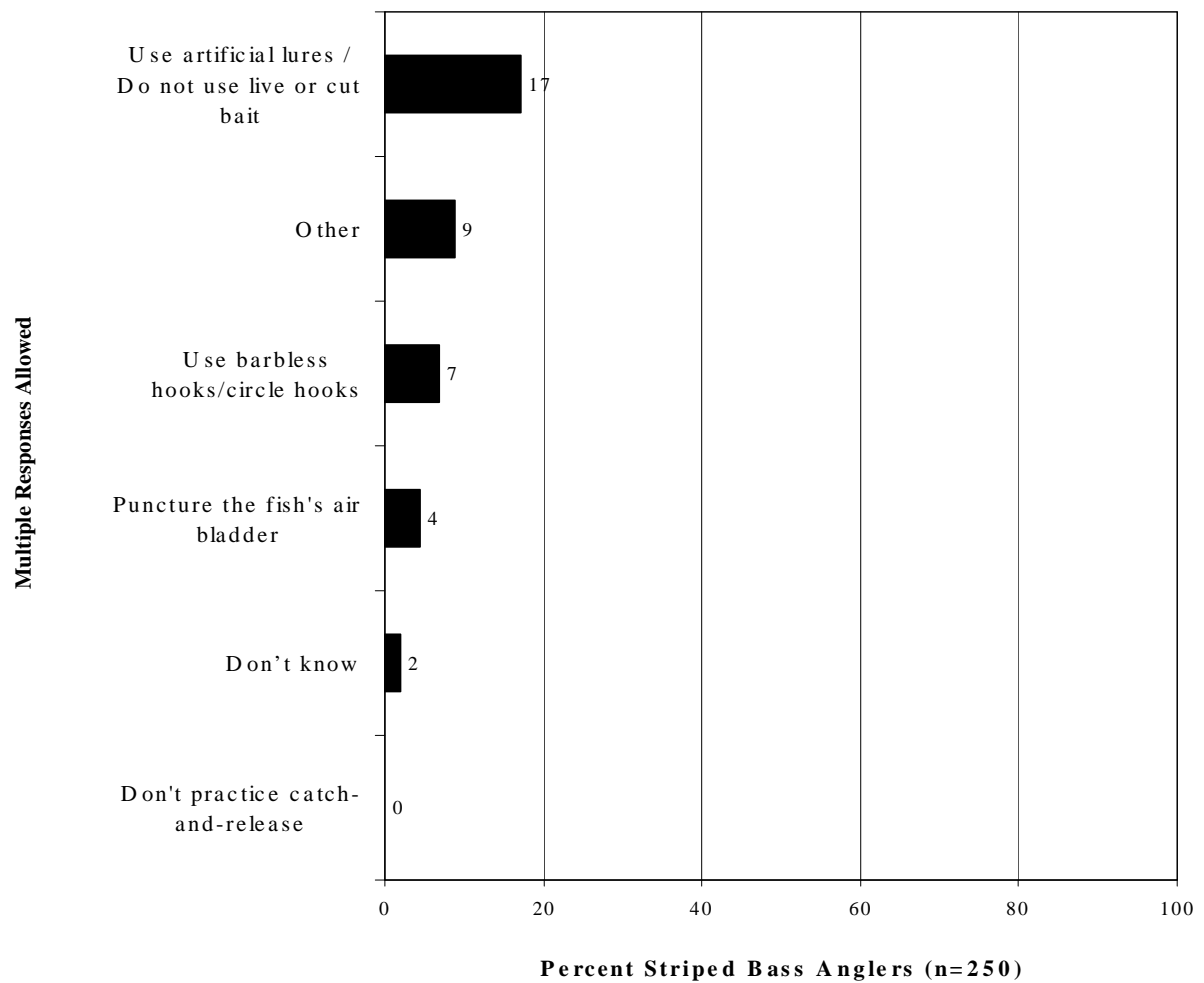


**Q48. How do you handle a striped bass smaller than the legal size limit to increase its chance of survival after being released?**



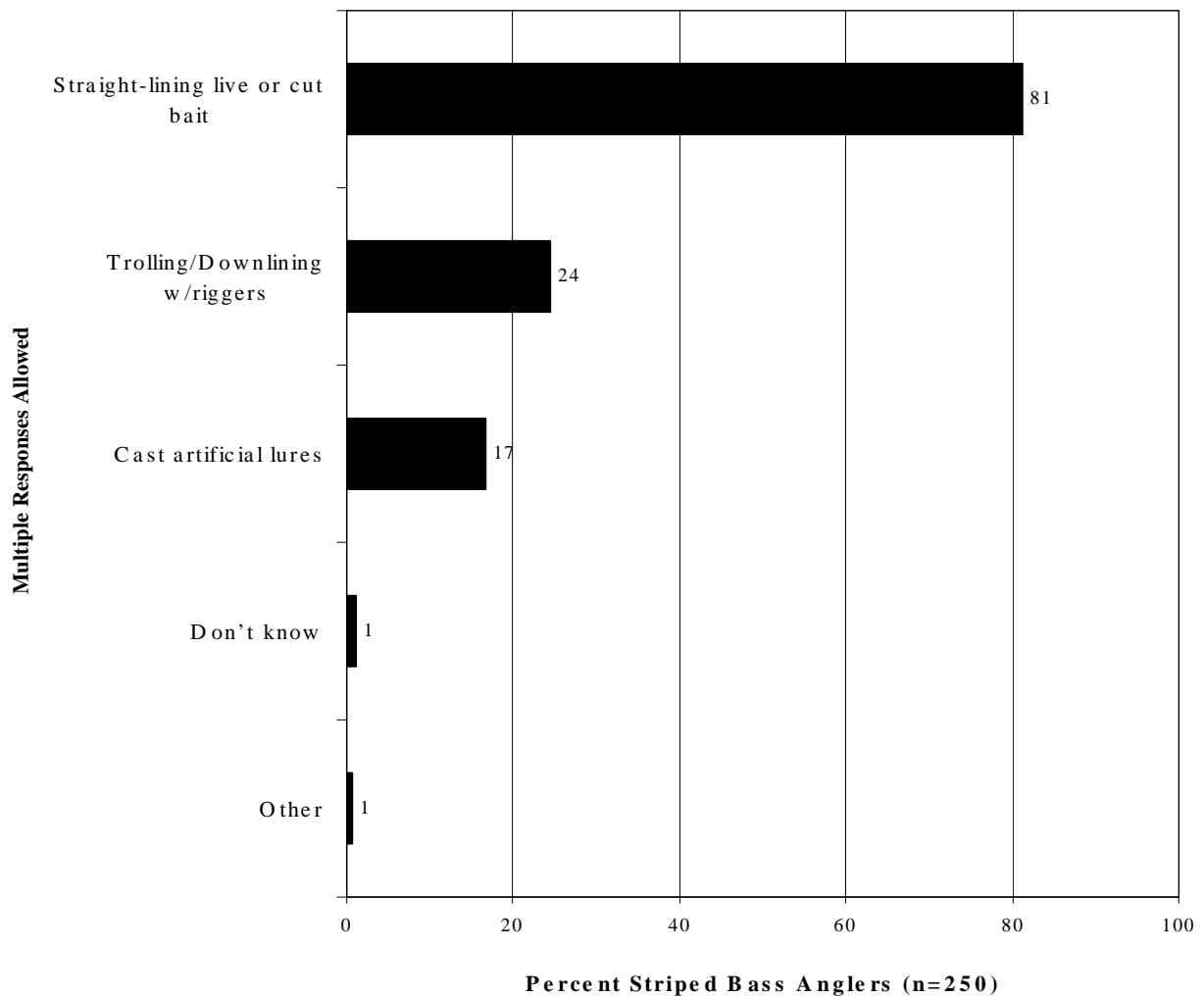


**Q 48(continued). How do you handle a striped bass smaller than the legal size limit to increase its chance of survival after being released?**



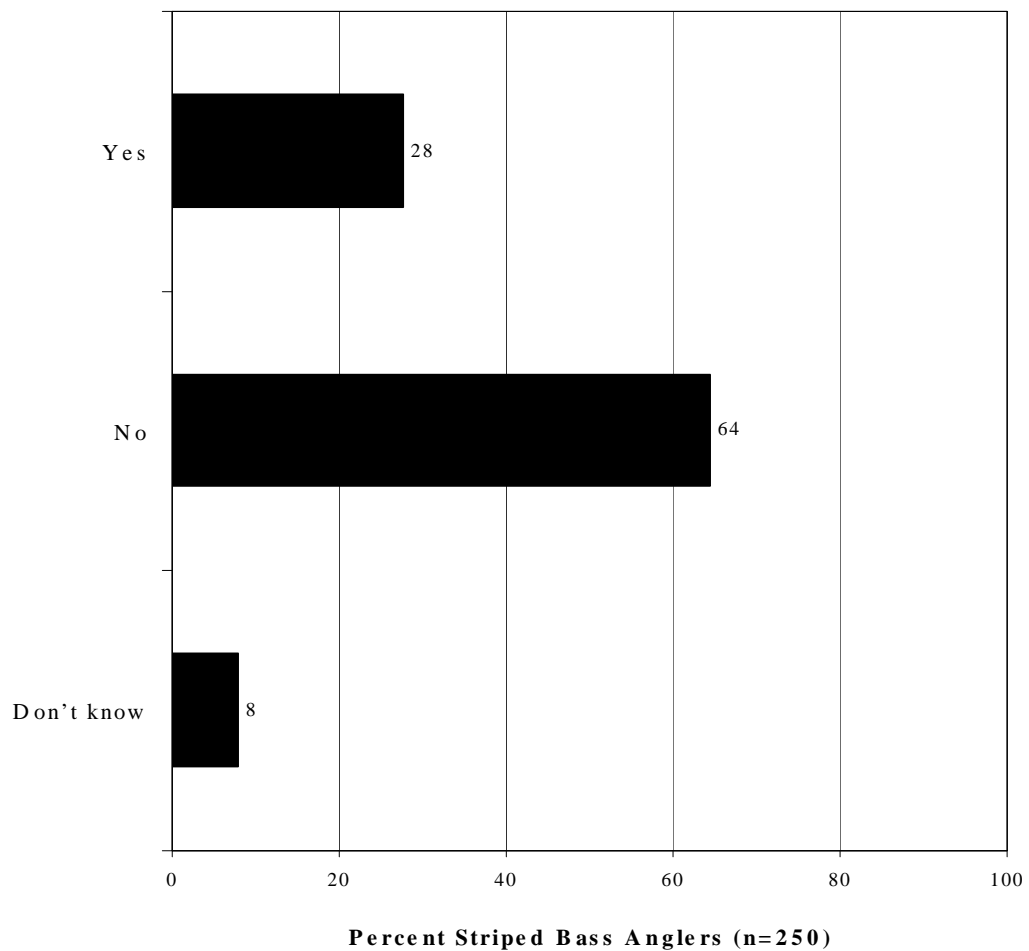


**Q51. During the summer months, what kind of technique/bait do you use most often while fishing for striped bass on Lake Murray?**



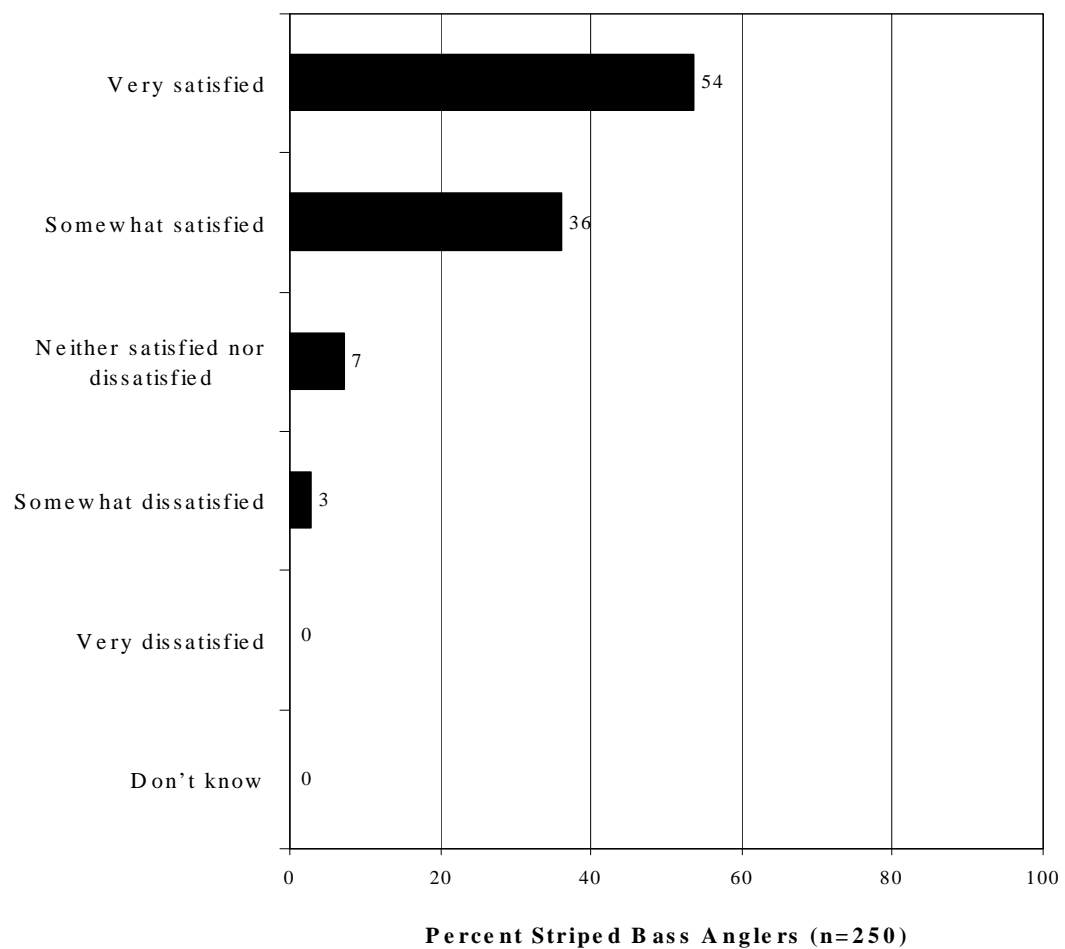


**Q 53. During the summer months, do you regularly use circle hooks while fishing for striped bass on Lake Murray?**



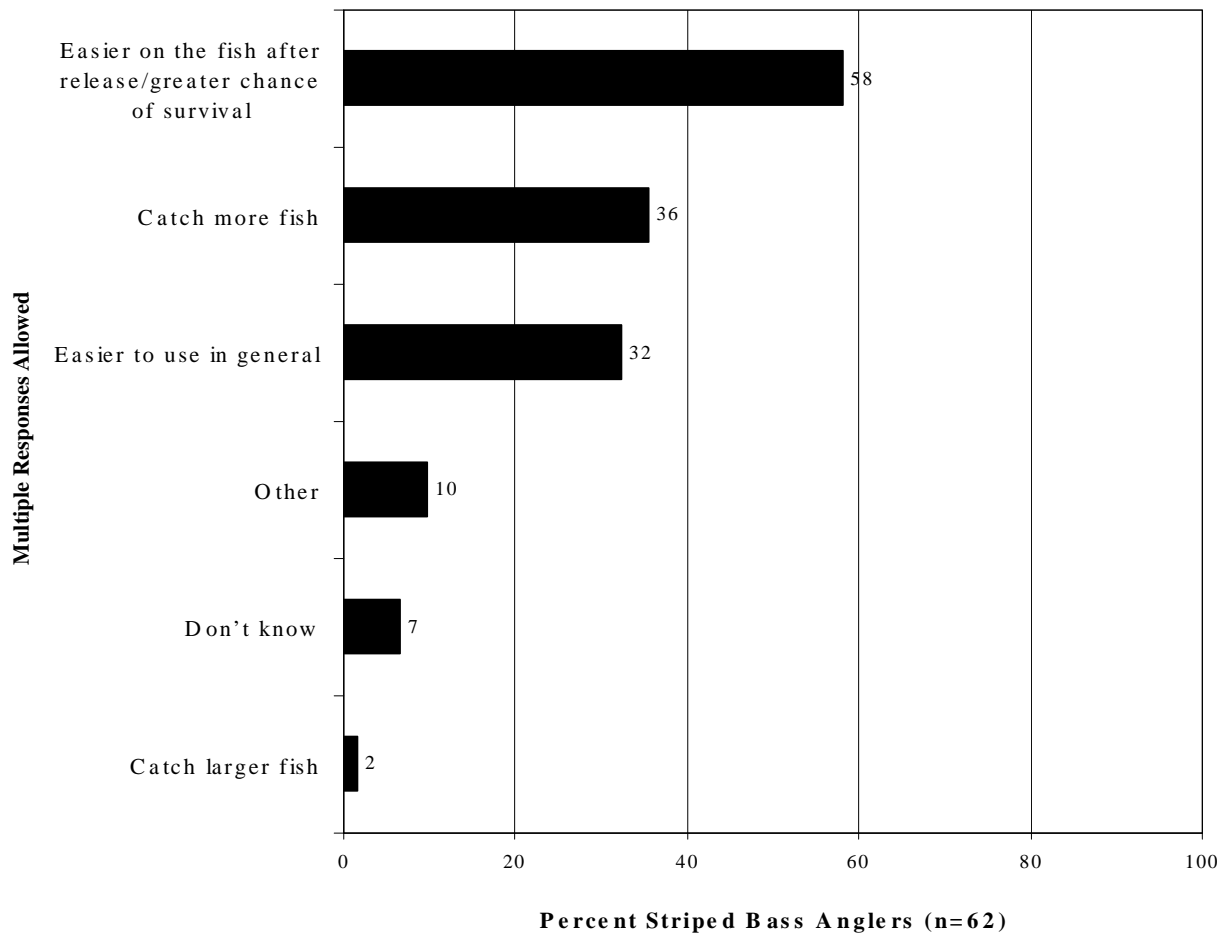


**Q54. Are you satisfied or dissatisfied with your experiences using circle hooks while fishing for striped bass on Lake Murray?**



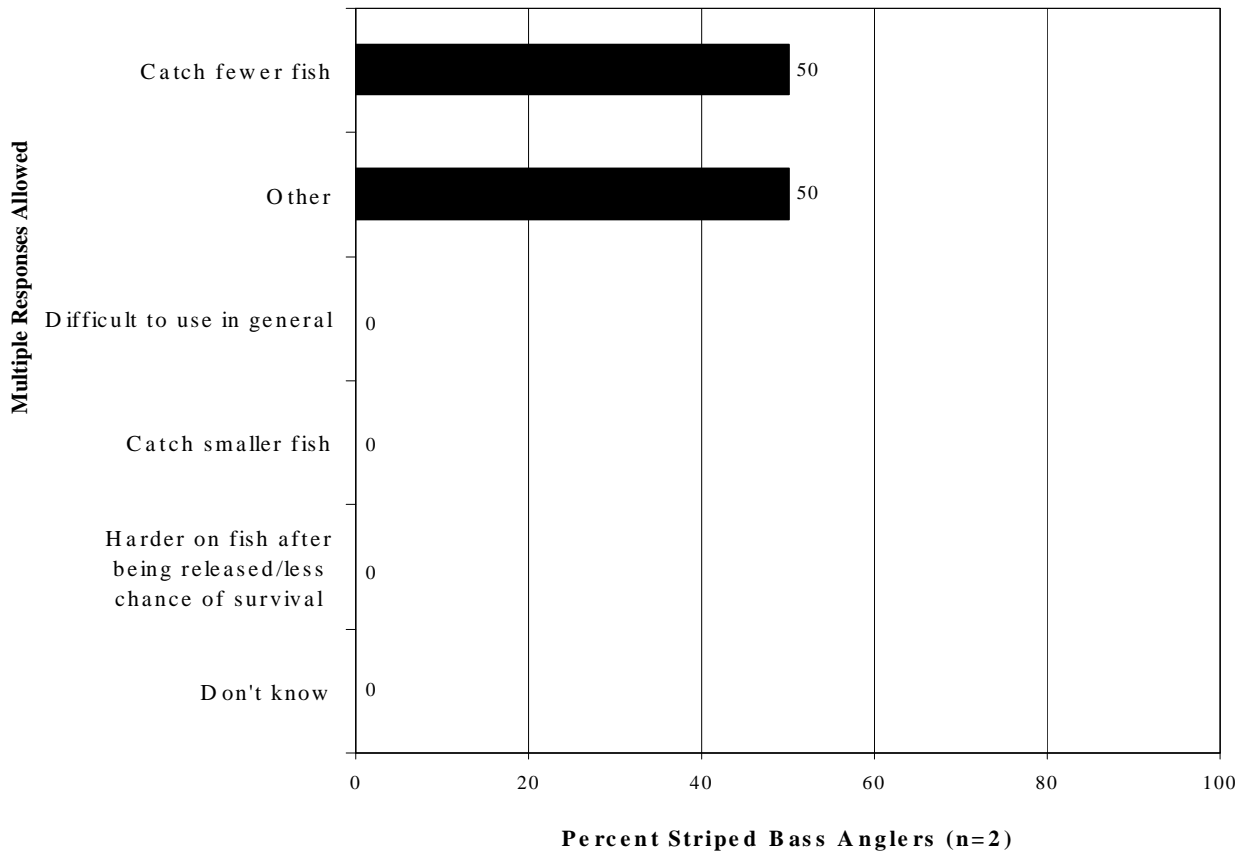


**Q 56. What are the main reasons that you are satisfied with using circle hooks while fishing for striped bass on Lake Murray?**  
**(Percent of striped bass anglers that are satisfied with their experiences using circle hooks)**



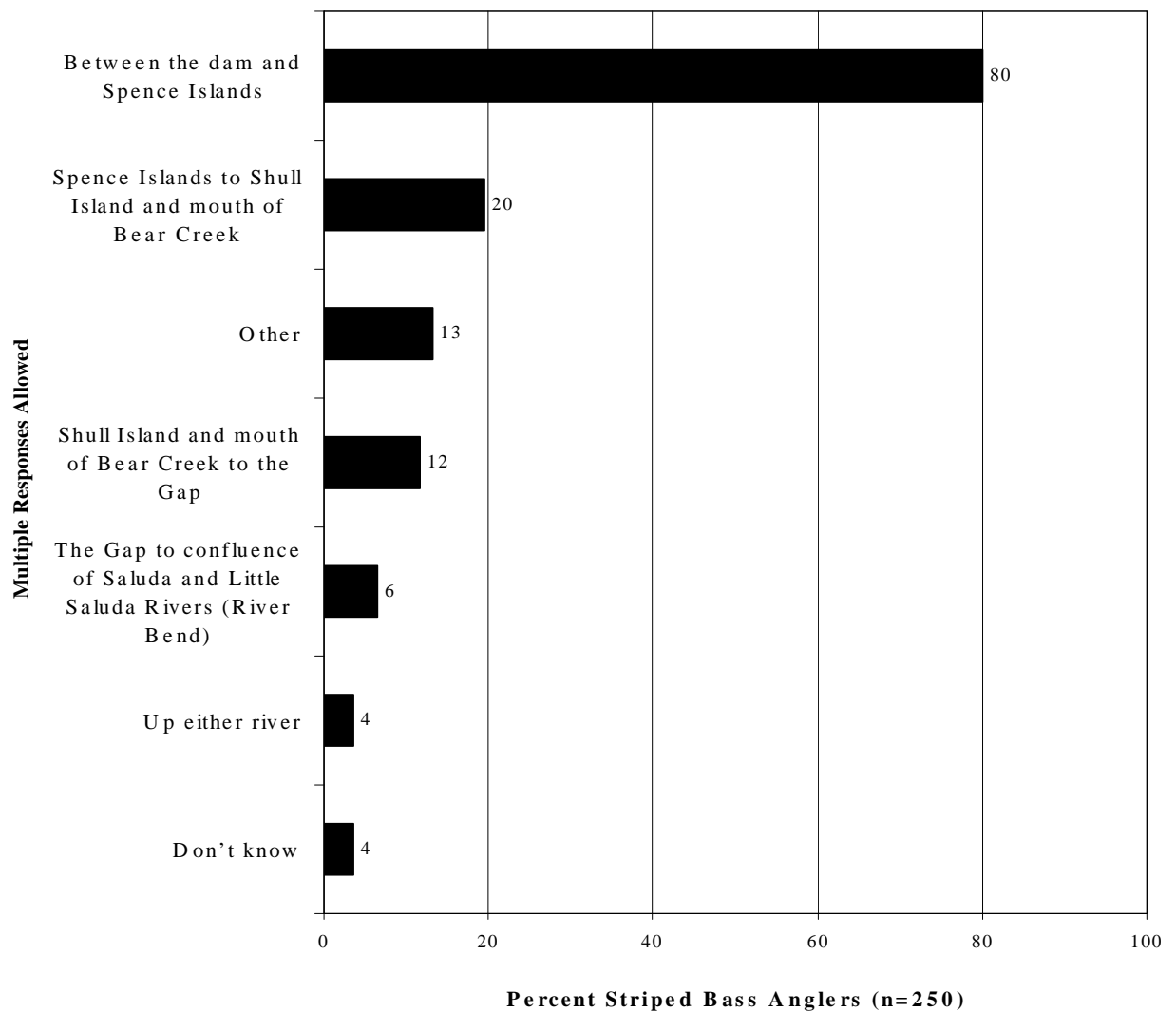


**Q 59. What are the main reasons that you are dissatisfied with using circle hooks while fishing for striped bass on Lake Murray?**  
**(Percent of striped bass anglers that are dissatisfied with their experiences using circle hooks)**



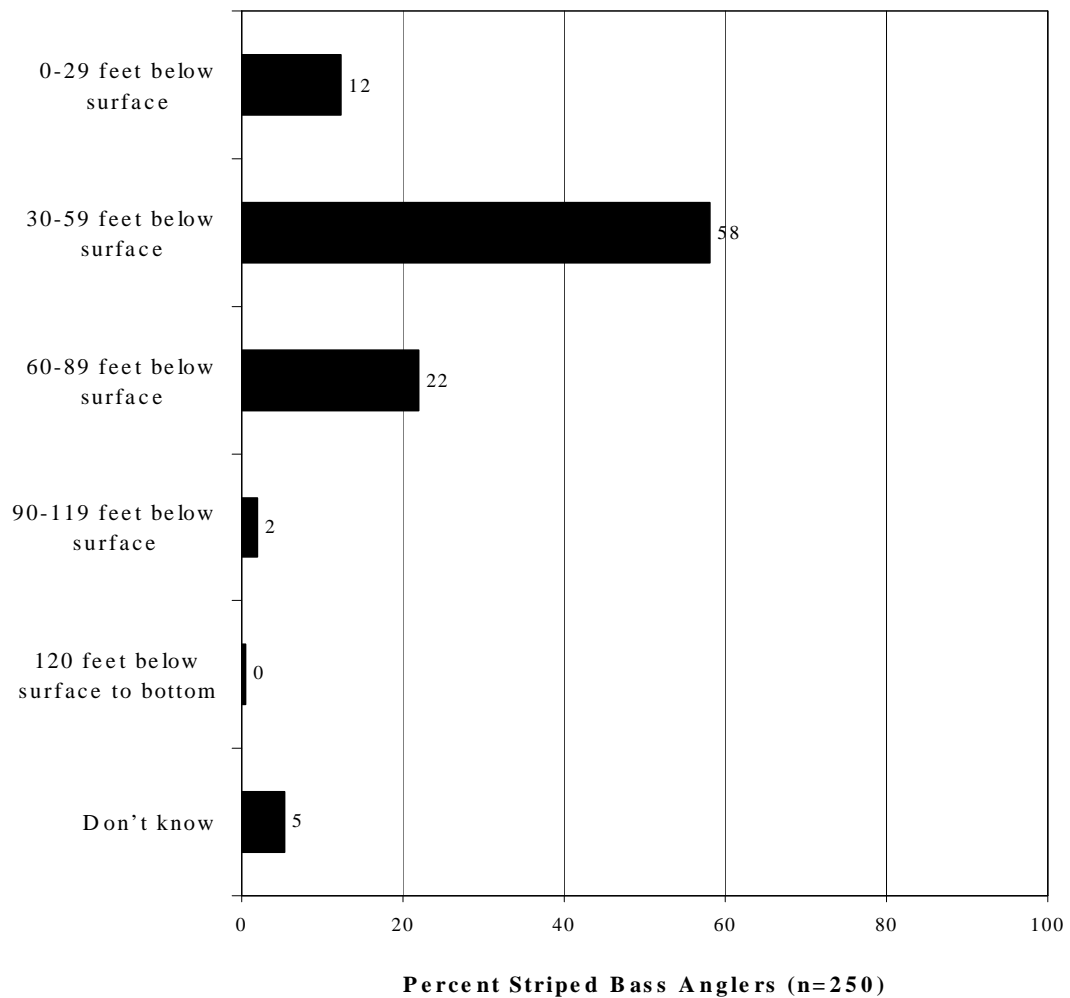


**Q 62. In what regions of Lake Murray do you normally fish for striped bass during the summer?**



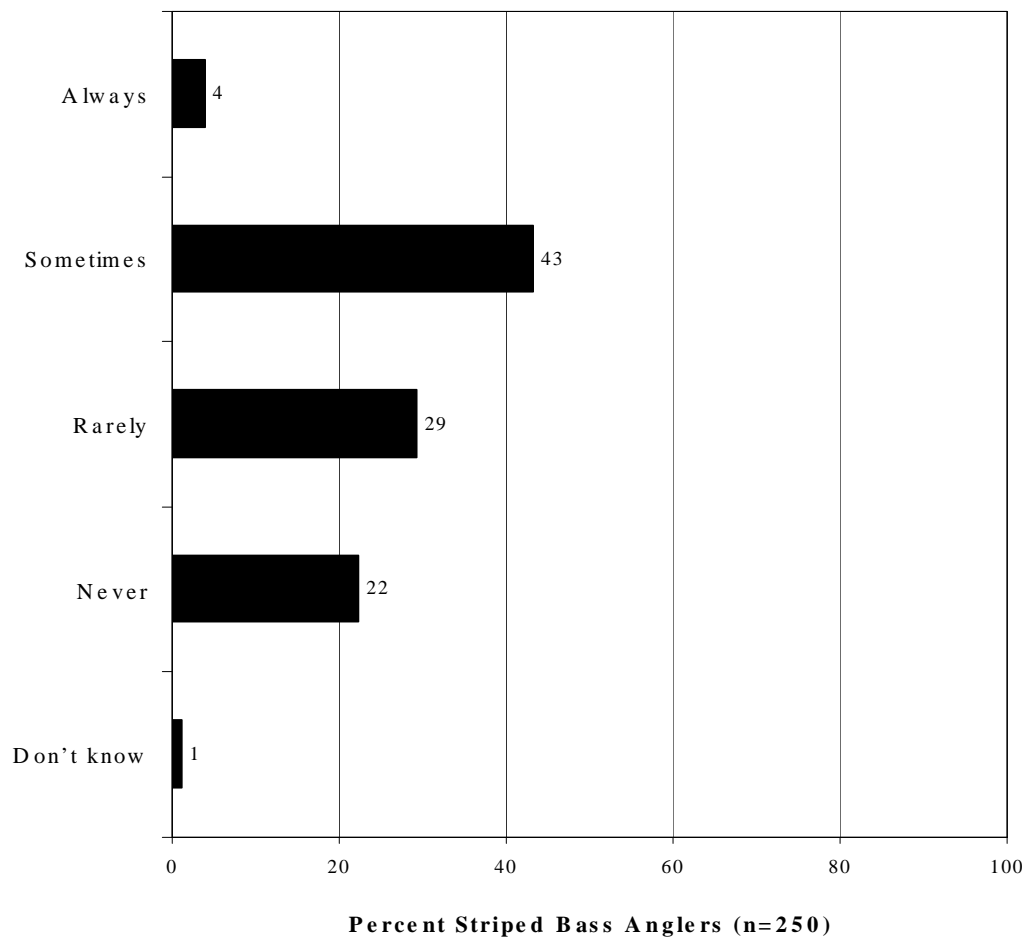


**Q64. At what depths do you most often catch fish during the summer on Lake Murray?**



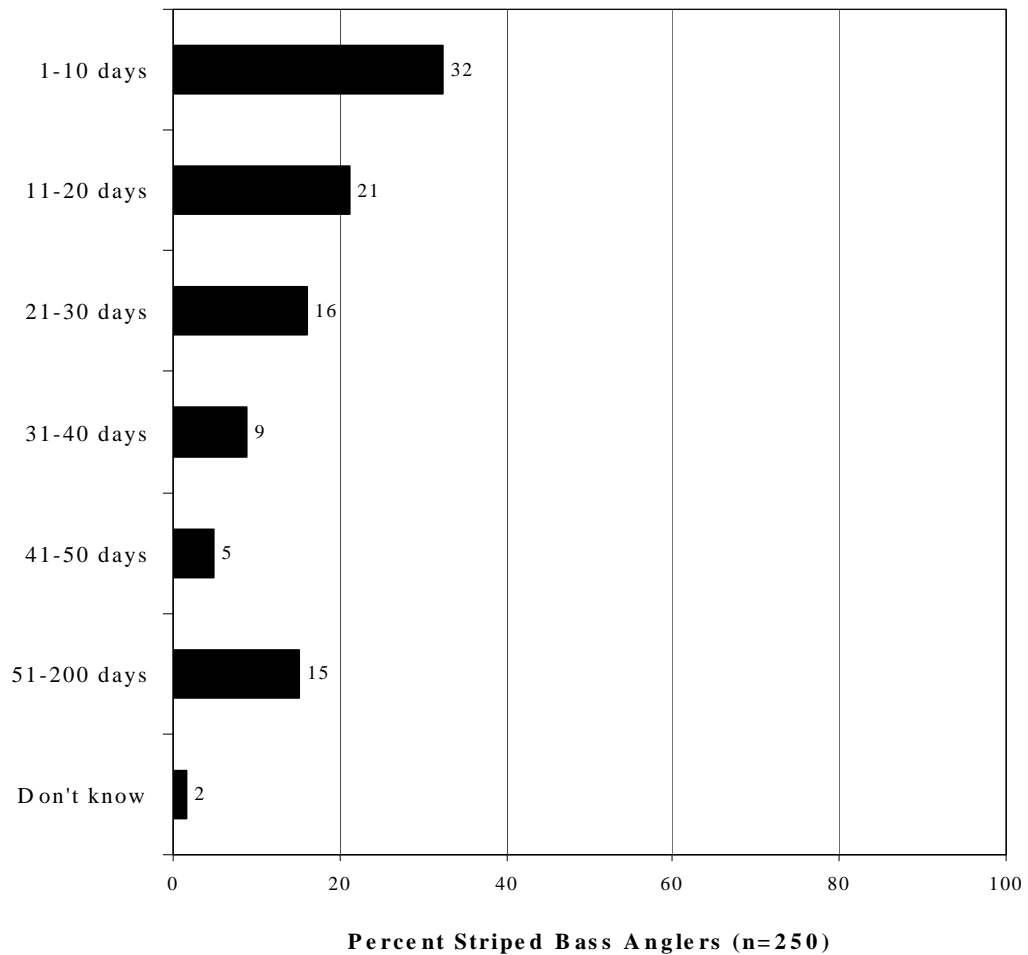


**Q 65. Would you say that you are checked by South Carolina Department of Natural Resources law enforcement officers for undersized fish, or being over the limit for striped bass... ?**



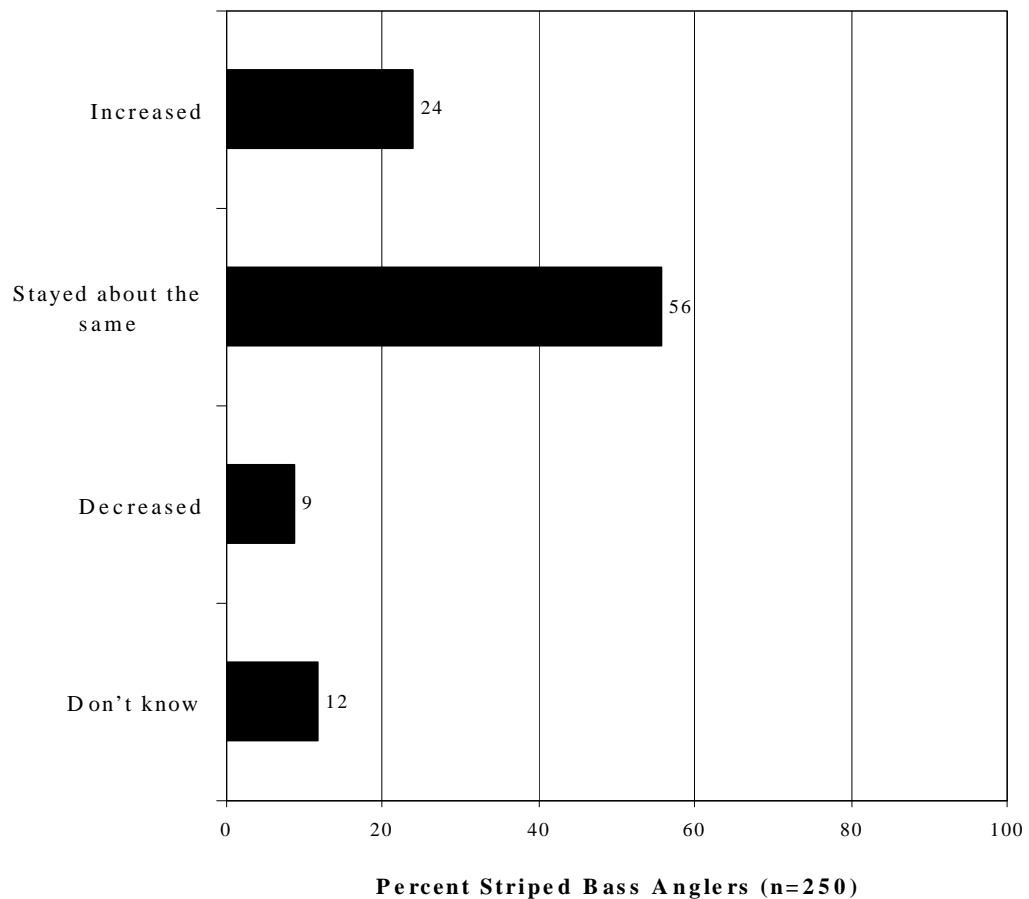


**Q 67. First, how many days total did you fish for striped bass from January 1, 1999 to December 1, 1999 on Lake Murray?**



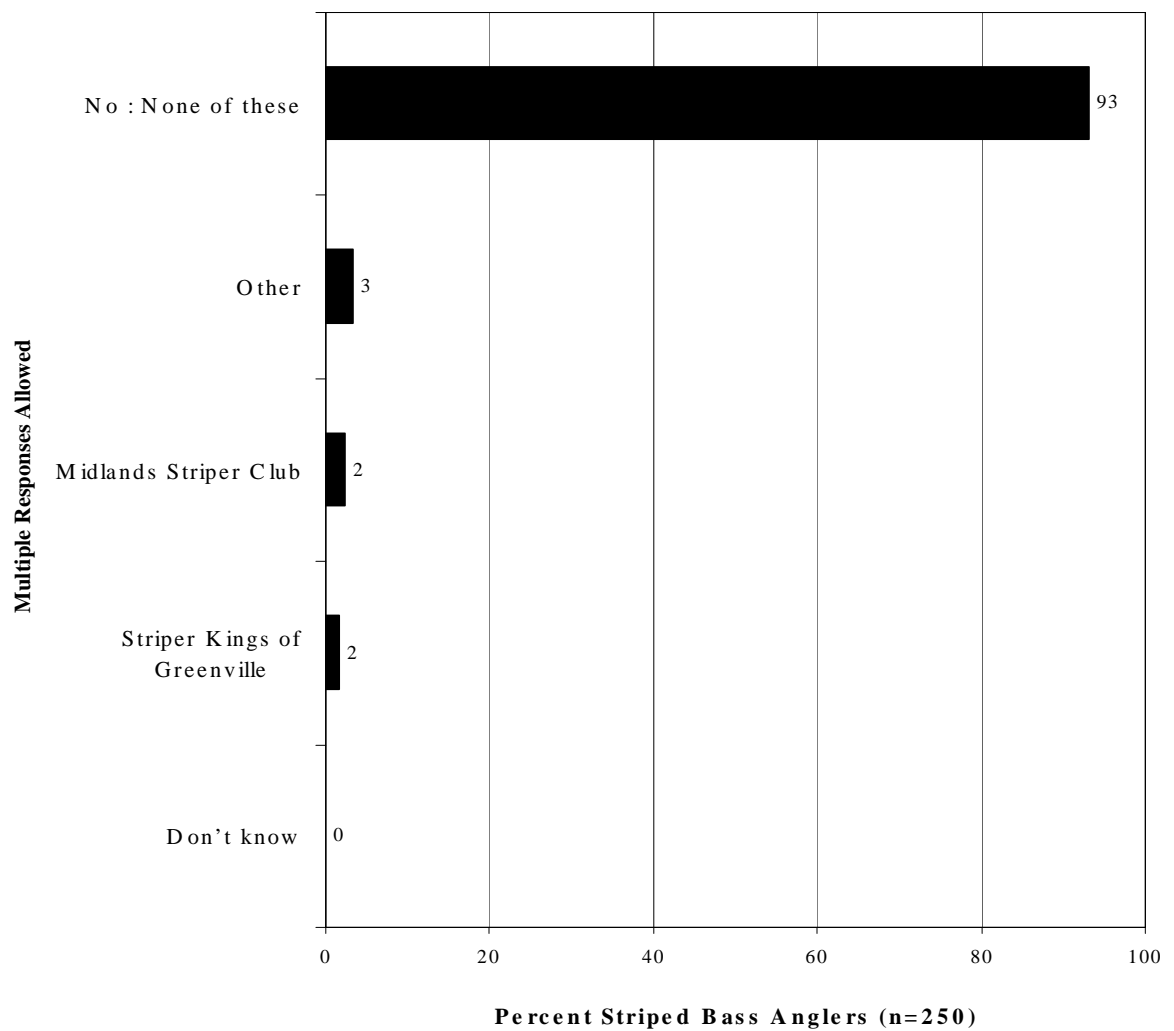


**Q68. And since the 5/21 was put into effect, would you say that the number of days per year you fish for striped bass on Lake Murray has increased, stayed about the same, or decreased?**





**Q 70. Do you belong to or are you affiliated with any striped bass fishing club or organization?**





## SURVEY INSTRUMENT

Lake Murray Striped Bass Angler Survey  
Copyright Responsive Management 1999

1. PRESS RETURN WHEN SOMEONE ANSWERS

START

TIMER STARTS AFTER THIS SCREEN

2. Time when interview began

TIME1 1:1-5

|\_|\_|\_|\_|\_|\_|\_|

3. Hi, my name is -----, I'm calling on behalf of the South Carolina Department of Natural Resources to ask your opinions about striped bass management on Lake Murray. We're not selling anything and your answers are completely confidential. Do you have a few minutes to answer some questions for us?

CONPER 1:6

(CHECK ONLY ONE ANSWER)

- |   |  |
|---|--|
| _ | 1. Correct person, good time to do survey (GO TO QUESTION 5) |
| _ | 2. Bad time/schedule recall (CB) (GO TO QUESTION 4)          |
| _ | 3. RF, AM, BG, DL, DS, NA, BZ                                |

SKIP TO QUESTION 80

=====

4. When would be the best time for me to call back?  
Thank you for your time.

WHENCALL

ENTER DAY/TIME ON CALL SHEET (CB)

SKIP TO QUESTION 80

=====

Lake Murray Striped Bass Angler Survey

Page 2

5. In general, how would you rate the quality of the striped bass fishery on Lake Murray? Would you say it is excellent, good, fair, poor, or do you not know?  
(READ SCALE AS NECESSARY)

HOWGOOD 1:7

(CHECK ONLY ONE ANSWER)

- |                          |   |
|--------------------------|---|
| <input type="checkbox"/> | 1. Invalid answer. Select another. (GO TO QUESTION 5) |
| <input type="checkbox"/> | 2. Excellent  |
| <input type="checkbox"/> | 3. Good   |
| <input type="checkbox"/> | 4. Fair   |
| <input type="checkbox"/> | 5. Poor   |
| <input type="checkbox"/> | 6. Don't know   |

6. Overall, do you think the Fisheries Section of the South Carolina Department of Natural Resources does an excellent, good, fair or poor job with respect to the striped bass fishery on Lake Murray, or do you not know?  
(READ SCALE AS NECESSARY)

DEPTJOB 1:8

(CHECK ONLY ONE ANSWER)

- |                          |   |
|--------------------------|---|
| <input type="checkbox"/> | 1. Invalid answer. Select another. (GO TO QUESTION 6) |
| <input type="checkbox"/> | 2. Excellent  |
| <input type="checkbox"/> | 3. Good   |
| <input type="checkbox"/> | 4. Fair   |
| <input type="checkbox"/> | 5. Poor   |
| <input type="checkbox"/> | 6. Don't know   |

7. Overall, would you say that you are satisfied or dissatisfied with the Department of Natural Resources' management of striped bass on Lake Murray?

(READ SCALE AS NECESSARY; PROMPT FOR DEGREE)

HAPPY 1:9

(CHECK ONLY ONE ANSWER)

- |                          |   |
|--------------------------|---|
| <input type="checkbox"/> | 1. Invalid answer. Select another. (GO TO QUESTION 7) |
| <input type="checkbox"/> | 2. Very satisfied (GO TO QUESTION 9)                  |
| <input type="checkbox"/> | 3. Somewhat satisfied (GO TO QUESTION 9)              |
| <input type="checkbox"/> | 4. Neither satisfied nor dissatisfied                 |
| <input type="checkbox"/> | 5. Somewhat dissatisfied (GO TO QUESTION 12)          |
| <input type="checkbox"/> | 6. Very dissatisfied (GO TO QUESTION 12)              |
| <input type="checkbox"/> | 7. Don't know   |

SKIP TO QUESTION 14

=====

Lake Murray Striped Bass Angler Survey

Page 3

8. YOU DID NOT USE  
YOUR SPACE BAR

NOSPAC1

PRESS ENTER TO TRY AGAIN

9. What are the main reasons that you are satisfied with the  
Department's management of striped bass on Lake Murray?  
(DNR LIST; CHECK ALL THAT APPLY)  
(IF REGULATIONS CITED, PROBE FOR SPECIFICS)

DNRSAT 1:10-18

(CHECK ALL THAT APPLY)

regulations	<input type="checkbox"/>	1. Plenty of fish in general
	<input type="checkbox"/>	2. Plenty of large/trophy fish
	<input type="checkbox"/>	3. Quality of fish health - good health
	<input type="checkbox"/>	4. Regulations - specifically 21" length limit
	<input type="checkbox"/>	5. Regulations - 5 fish creel limit
	<input type="checkbox"/>	6. Clean water / good water quality / no pollution
	<input type="checkbox"/>	7. Good/sufficient law enforcement / enforcement of
	<input type="checkbox"/>	8. Other
	<input type="checkbox"/>	9. Don't know

IF (#9 = 0) GO TO #8  
IF (#9 @ 8) GO TO #10

SKIP TO QUESTION 14

=====

10. ENTER OTHER REASON FOR SATISFACTION  
(FIRST PERSON; 120 CHAR)

DNRSATST 2:1-120

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SKIP TO QUESTION 14

=====

11. YOU DID NOT USE  
YOUR SPACE BAR

NOSPAC2

PRESS ENTER TO TRY AGAIN

## Lake Murray Striped Bass Angler Survey

Page 4

12. What are the main reasons that you are dissatisfied with the Department's management of striped bass on Lake Murray?  
(DNR LIST; CHECK ALL THAT APPLY)  
(IF REGULATIONS CITED, PROBE FOR SPECIFICS)

DNRDIS 3:1-10

(CHECK ALL THAT APPLY)

- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | 1. Not enough fish in general                                |
| <input type="checkbox"/> | 2. Not enough large/trophy fish                              |
| <input type="checkbox"/> | 3. Too many fish   |
| <input type="checkbox"/> | 4. Quality of fish health - poor health                      |
| <input type="checkbox"/> | 5. Regulations - 21" length limit                            |
| <input type="checkbox"/> | 6. Regulations - 5 fish creel limit                          |
| <input type="checkbox"/> | 7. Unclean water / poor water quality / pollution            |
| <input type="checkbox"/> | 8. Poor/lack of law enforcement / enforcement of regulations |
| <input type="checkbox"/> | 9. Other   |
| <input type="checkbox"/> | 10. Don't know   |

IF (#12 = 0) GO TO #11

IF (#12 @ 9) GO TO #13

SKIP TO QUESTION 14

=====

13. ENTER OTHER REASON FOR DISSATISFACTION  
(IN FIRST PERSON; 120 CHAR)

DNRDISST 4:1-120

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14. Before this survey, were you aware that Lake Murray is a put-grow-and-take fishery, that is, it is maintained by yearly stockings of 1" fish that are allowed to grow until reaching the size limit?

PUTGROW 5:1

(CHECK ONLY ONE ANSWER)

- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | 1. Invalid answer. Select another. (GO TO QUESTION 14) |
| <input type="checkbox"/> | 2. Yes   |
| <input type="checkbox"/> | 3. No  |
| <input type="checkbox"/> | 4. Don't know  |

Lake Murray Striped Bass Angler Survey

Page 5

15. Now I'd like to ask you some questions regarding fishing regulations on Lake Murray. In May of 1991, the South Carolina Department of Natural Resources implemented new regulations on striped bass in Lake Murray. The creel limit was lowered from 10 fish per day to a limit of 5 fish per day and a minimum size limit of 21 inches was put into effect. These regulations are commonly referred to as the 5/21 regulation. Since the 5/21 was put into place, do you think that fishing for striped bass on Lake Murray has improved, stayed about the same, or declined?  
(READ SCALE AS NECESSARY; PROMPT FOR DEGREE)

FIVE21 5:2

(CHECK ONLY ONE ANSWER)

- |                          |   |
|--------------------------|---|
| <input type="checkbox"/> | 1. Invalid answer. Select another. (GO TO QUESTION 15)    |
| <input type="checkbox"/> | 2. Greatly improved                                       |
| <input type="checkbox"/> | 3. Somewhat improved                                      |
| <input type="checkbox"/> | 4. Stayed about the same                                  |
| <input type="checkbox"/> | 5. Somewhat declined                                      |
| <input type="checkbox"/> | 6. Greatly declined                                       |
| <input type="checkbox"/> | 7. Don't know/Did not fish on Lake Murray before the 5/21 |

SKIP TO QUESTION 17

=====

16. YOU DID NOT USE  
YOUR SPACE BAR

NOSPAC3

PRESS ENTER TO TRY AGAIN

17. What do you consider to be a striped bass worth keeping?  
(DNR LIST; CHECK ALL THAT APPLY)

KEEPER 5:3-6

(CHECK ALL THAT APPLY)

- |                          |                                     |
|--------------------------|-------------------------------------|
| <input type="checkbox"/> | 1. Size (goes to specific length)   |
| <input type="checkbox"/> | 2. Weight (goes to specific weight) |
| <input type="checkbox"/> | 3. Other                            |
| <input type="checkbox"/> | 4. Don't know                       |

IF (#17 = 0) GO TO #16

IF (#17 @ 3) GO TO #18

IF (#17 @ 1) GO TO #19

IF (#17 @ 2) GO TO #20

SKIP TO QUESTION 22

=====

Lake Murray Striped Bass Angler Survey

Page 6

18. ENTER OTHER REASON FOR KEEPING  
(IN FIRST PERSON; 120 CHAR)

KEEPERST 6:1-120

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IF (#17 @ 1) GO TO #19  
IF (#17 @ 2) GO TO #20

SKIP TO QUESTION 22

=====

19. ENTER LENGTH OF A KEEPER FISH  
(2 DIGITS ALLOWED; 99 FOR DON'T KNOW)

SIZEKEEP 7:1-2

|\_|\_|

IF (#17 @ 2) GO TO #20

SKIP TO QUESTION 22

=====

20. ENTER WEIGHT OF A KEEPER FISH  
(2 DIGITS ALLOWED; 99 FOR DON'T KNOW)

WTKEEP 7:3-4

|\_|\_|

SKIP TO QUESTION 22

=====

21. YOU DID NOT USE  
YOUR SPACE BAR

NOSPAC99

PRESS ENTER TO TRY AGAIN

Lake Murray Striped Bass Angler Survey

Page 7

22. What do you consider to be a quality striped bass?  
(DNR LIST; CHECK ALL THAT APPLY)  
(IF ASKED: DEFINITION OF QUALITY IS TO BE  
DETERMINED BY THE RESPONDENT)

QUAL 7:5-8

(CHECK ALL THAT APPLY)

- |                          |                                     |
|--------------------------|-------------------------------------|
| <input type="checkbox"/> | 1. Size (goes to specific length)   |
| <input type="checkbox"/> | 2. Weight (goes to specific weight) |
| <input type="checkbox"/> | 3. Other                            |
| <input type="checkbox"/> | 4. Don't know                       |

IF (#22 = 0) GO TO #21  
IF (#22 @ 3) GO TO #23  
IF (#22 @ 1) GO TO #24  
IF (#22 @ 2) GO TO #25

SKIP TO QUESTION 26

=====

23. ENTER OTHER REASON FOR QUALITY STRIPED BASS  
(IN FIRST PERSON; 120 CHAR)

QUALST 8:1-120

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IF (#22 @ 1) GO TO #24  
IF (#22 @ 2) GO TO #25

SKIP TO QUESTION 26

=====

24. ENTER LENGTH OF A QUALITY STRIPED BASS  
(2 DIGITS ALLOWED; 99 FOR DON'T KNOW)

SIZEQUAL 9:1-2

|\_\_|\_\_|

IF (#22 @ 2) GO TO #25

SKIP TO QUESTION 26

=====

25. ENTER WEIGHT OF A QUALITY STRIPED BASS  
(2 DIGITS ALLOWED; 99 FOR DON'T KNOW)

WTQUAL 9:3-4

|\_\_|\_\_|

26. Since the 5/21 was put into effect, do you think there are more, about the same number, or less quality striped bass, as you perceive it on Lake Murray?

(READ SCALE AS NECESSARY; PROMPT FOR DEGREE)

MOREQUAL 9:5

(CHECK ONLY ONE ANSWER)

- |    |  |
|----|--|
| __ | 1. Invalid answer. Select another. (GO TO QUESTION 26) |
| __ | 2. Much more   |
| __ | 3. Somewhat more                                       |
| __ | 4. The same  |
| __ | 5. Somewhat less                                       |
| __ | 6. Much less   |
| __ | 7. Don't know  |

SKIP TO QUESTION 28

=====

27. YOU DID NOT USE  
YOUR SPACE BAR

NOSPAC4

PRESS ENTER TO TRY AGAIN

28. What do you consider to be a trophy striped bass?  
(DNR LIST; CHECK ALL THAT APPLY)

TROPHY 9:6-9

(CHECK ALL THAT APPLY)

- |    |                                     |
|----|-------------------------------------|
| __ | 1. Size (goes to specific length)   |
| __ | 2. Weight (goes to specific weight) |
| __ | 3. Other                            |
| __ | 4. Don't know                       |

IF (#28 = 0) GO TO #27

IF (#28 @ 3) GO TO #29

IF (#28 @ 1) GO TO #30

IF (#28 @ 2) GO TO #31

SKIP TO QUESTION 32

=====

Lake Murray Striped Bass Angler Survey

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29. ENTER OTHER REASON FOR TROPHY STRIPED BASS  
(IN FIRST PERSON; 120 CHAR)

TROPHYST 10:1-120

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IF (#28 @ 1) GO TO #30  
IF (#28 @ 2) GO TO #31

SKIP TO QUESTION 32

=====

30. ENTER LENGTH OF A TROPHY STRIPED BASS  
(2 DIGITS ALLOWED; 99 FOR DON'T KNOW)

SIZETROP 11:1-2

|\_\_|\_\_|

IF (#28 @ 2) GO TO #31

SKIP TO QUESTION 32

=====

31. ENTER WEIGHT OF A TROPHY STRIPED BASS  
(2 DIGITS ALLOWED; 99 FOR DON'T KNOW)

WTTROP 11:3-4

|\_\_|\_\_|

32. Since the 5/21 was put into effect, do you think there are more,  
about the same number, or less trophy striped bass, as  
you perceive it on Lake Murray?  
(READ SCALE AS NECESSARY; PROMPT FOR DEGREE)

MORETROP 11:5

(CHECK ONLY ONE ANSWER)

- |    |  |
|----|--|
| __ | 1. Invalid answer. Select another. (GO TO QUESTION 32) |
| __ | 2. Much more   |
| __ | 3. Somewhat more                                       |
| __ | 4. The same  |
| __ | 5. Somewhat less                                       |
| __ | 6. Much less   |
| __ | 7. Don't know  |

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33. Now, I have some questions regarding catch-and-release fishing on Lake Murray. First, do you feel that the release of fish that are smaller than the size limit causes the death of the fish always, sometimes, rarely, never or do you not know?  
(READ SCALE AS NECESSARY)

FSHDEATH 11:6

(CHECK ONLY ONE ANSWER)

- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | 1. Invalid answer. Select another. (GO TO QUESTION 33) |
| <input type="checkbox"/> | 2. Always  |
| <input type="checkbox"/> | 3. Sometimes   |
| <input type="checkbox"/> | 4. Rarely  |
| <input type="checkbox"/> | 5. Never   |
| <input type="checkbox"/> | 6. Don't know  |

34. And do you agree or disagree with the following statement? Even if catch-and-release causes the death of some fish it is acceptable in order to improve the striped bass fishery on Lake Murray.

(READ SCALE AS NECESSARY; PROMPT FOR DEGREE)

NEEDCNR 11:7

(CHECK ONLY ONE ANSWER)

- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | 1. Invalid answer. Select another. (GO TO QUESTION 34) |
| <input type="checkbox"/> | 2. Strongly agree                                      |
| <input type="checkbox"/> | 3. Somewhat agree                                      |
| <input type="checkbox"/> | 4. Neither agree nor disagree                          |
| <input type="checkbox"/> | 5. Somewhat disagree                                   |
| <input type="checkbox"/> | 6. Strongly disagree                                   |
| <input type="checkbox"/> | 7. Don't know  |

SKIP TO QUESTION 36

=====

35. YOU DID NOT USE  
YOUR SPACE BAR

NOSPAC5

PRESS ENTER TO TRY AGAIN

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36. On Lake Murray, do you feel that catch-and-release fishing is more of a problem for the striped bass during some months than others?

(IF YES: IN WHAT MONTHS?)

(DNR LIST; CHECK ALL THAT APPLY)

MONTHS 11:8-21

(CHECK ALL THAT APPLY)

- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | 1. January   |
| <input type="checkbox"/> | 2. February  |
| <input type="checkbox"/> | 3. March   |
| <input type="checkbox"/> | 4. April   |
| <input type="checkbox"/> | 5. May   |
| <input type="checkbox"/> | 6. June  |
| <input type="checkbox"/> | 7. July  |
| <input type="checkbox"/> | 8. August  |
| <input type="checkbox"/> | 9. September   |
| <input type="checkbox"/> | 10. October  |
| <input type="checkbox"/> | 11. November   |
| <input type="checkbox"/> | 12. December   |
| <input type="checkbox"/> | 13. No: it's not more of a problem in any particular month |
| <input type="checkbox"/> | 14. Don't know   |

IF (#36 = 0) GO TO #35

37. There is some evidence of greater physical stress on the striped bass population during the summer months compared to other times of the year. Given this information, what do you think the South Carolina Department of Natural Resources should do? Please tell me which one of the following management options you prefer.

SUMMER

PRESS ENTER TO CONTINUE

38. RANDOMIZATION OF OPTIONS

RANDOM 11:22

(CHECK ONLY ONE ANSWER)

- |                          |                                    |
|--------------------------|------------------------------------|
| <input type="checkbox"/> | 1. To option 1 (GO TO QUESTION 39) |
| <input type="checkbox"/> | 2. To option 2 (GO TO QUESTION 40) |
| <input type="checkbox"/> | 3. To option 3 (GO TO QUESTION 41) |
| <input type="checkbox"/> | 4. To option 4 (GO TO QUESTION 42) |

39. One management option is to not allow striped bass fishing at all during the summer months. This may result in larger populations of striped bass and therefore greater competition for food.

OPTION1

PRESS ENTER TO CONTINUE

IF (#38 = 2) GO TO #43

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40. One management option is to remove the length limit and allow any fish to be harvested during the summer months, possibly resulting in larger numbers of fish caught and a reduction in the number of large fish.

OPTION2

PRESS ENTER TO CONTINUE

IF (#38 = 3) GO TO #43

41. One management option is for the department could reduce the length limit from 21 to 18 inches to allow smaller fish to be harvested during the summer months, which may also result in somewhat smaller sized fish.

OPTION3

PRESS ENTER TO CONTINUE

IF (#38 = 4) GO TO #43

42. One management option is to maintain the 21 inch length limit, but also allow two fish of the five fish creel limit to be smaller than the 21 inch restriction, during the summer months. This also may result in somewhat smaller fish, increased fish harvests and decreased striped bass populations.

OPTION4

PRESS ENTER TO CONTINUE

IF (#38 = 1) GO TO #43

SKIP TO QUESTION 39

=====

43. Which one of those management options would you choose?

(READ SCALE AS NECESSARY; SELECT ONLY ONE ANSWER)

CHOICES 11:23

(CHECK ONLY ONE ANSWER)

- |        |   |
|--------|---|
| summer | <input type="checkbox"/> 1. Invalid answer. Select another. (GO TO QUESTION 43)<br><input type="checkbox"/> 2. No striped bass summer fishing<br><input type="checkbox"/> 3. Remove length limit, allowing any fish to be caught in |
| summer | <input type="checkbox"/> 4. Reduce length limit to 18in. during summer<br><input type="checkbox"/> 5. Allow 2 of the 5 fish creel limit to be less than 21in. in  |
|        | <input type="checkbox"/> 6. Don't know<br><input type="checkbox"/> 7. (DNR; None of these/Leave it the way it is)<br><input type="checkbox"/> 8. (DNR; Other) (GO TO QUESTION 44)   |

SKIP TO QUESTION 45

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44. ENTER OTHER MANAGEMENT OPTION

CHOICE 12:1-120

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45. When you catch a fish that is smaller than the legal size limit (less than 21 inches), on Lake Murray, would you say you release it..?

(READ SCALE; CHECK ONLY ONE ANSWER)

BRKNDLAW 13:1

(CHECK ONLY ONE ANSWER)

- ☐ 1. Invalid answer. Select another. (GO TO QUESTION 45)
- ☐ 2. Always
- ☐ 3. Sometimes
- ☐ 4. Rarely
- ☐ 5. Never
- ☐ 6. Don't know

46. Are you aware of any of the South Carolina Department of Natural Resources' publications regarding catch-and-release of striped bass and other sport fish species?

HOWTO 13:2

(CHECK ONLY ONE ANSWER)

- ☐ 1. Invalid answer. Select another. (GO TO QUESTION 46)
- ☐ 2. Yes
- ☐ 3. No
- ☐ 4. Don't know

SKIP TO QUESTION 48

=====

47. YOU DID NOT USE  
YOUR SPACE BAR

NOSPAC6

PRESS ENTER TO TRY AGAIN

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48. Now I'd like to ask some specific questions about your fishing on Lake Murray. How do you handle a striped bass smaller than the legal size limit to increase its chance of survival after being released?

(DNR LIST; CHECK ALL THAT APPLY)

HLPFSH 13:3-15

(CHECK ALL THAT APPLY)

- ☐ 1. Keep fish in water as much as possible
- ☐ 2. Make the catch-and-release process as fast as possible
- ☐ 3. Play/land fish quickly; reel fish in quickly
- ☐ 4. Minimize handling (once fish is reeled in)
- ☐ 5. Cut line if hooked deeply
- ☐ 6. Revive fish
- ☐ 7. Use barbless hooks/circle hooks
- ☐ 8. Use artificial lures / Do not use live or cut bait
- ☐ 9. Use tools to remove hooks (including gloves)
- ☐ 10. Puncture the fish's air bladder
- ☐ 11. Other
- ☐ 12. Don't practice catch-and-release
- ☐ 13. Don't know

IF (#48 = 0) GO TO #47

IF (#48 @ 11) GO TO #49

SKIP TO QUESTION 51

=====

49. ENTER OTHER WAY TO INCREASE CHANCE  
OF SURVIVAL AFTER RELEASE  
(IN FIRST PERSON; 120 CHAR)

HLPFSHST 14:1-120

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SKIP TO QUESTION 51

=====

50. YOU DID NOT USE  
YOUR SPACE BAR

NOSPAC7

PRESS ENTER TO TRY AGAIN

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51. During the summer months, what kind of technique/bait do you use most often while fishing for striped bass on Lake Murray?  
(DNR LIST; CHECK ALL THAT APPLY)

BAIT 15:1-5

(CHECK ALL THAT APPLY)

- ☐ 1. Trolling/Down-lining w/riggers
- ☐ 2. Straight-lining live or cut bait
- ☐ 3. Cast artificial lures
- ☐ 4. Other
- ☐ 5. Don't know

IF (#51 = 0) GO TO #50

IF (#51 @ 4) GO TO #52

SKIP TO QUESTION 53

=====

52. ENTER OTHER TYPE OF TECHNIQUE/BAIT  
(IN FIRST PERSON; 120 CHAR)

BAITST 16:1-120

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53. During the summer months, do you regularly use circle hooks while fishing for striped bass on Lake Murray?

CIRCLEHK 17:1

(CHECK ONLY ONE ANSWER)

- ☐ 1. Invalid answer. Select another. (GO TO QUESTION 53)
- ☐ 2. Yes (GO TO QUESTION 54)
- ☐ 3. No
- ☐ 4. Don't know

SKIP TO QUESTION 62

=====

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54. Are you satisfied or dissatisfied with your experiences using circle hooks while fishing for striped bass on Lake Murray?  
(READ SCALE AS NECESSARY; PROMPT FOR DEGREE)

GOODHOOK 17:2

(CHECK ONLY ONE ANSWER)

- ☐ 1. Invalid answer. Select another. (GO TO QUESTION 54)
- ☐ 2. Very satisfied (GO TO QUESTION 56)
- ☐ 3. Somewhat satisfied (GO TO QUESTION 56)
- ☐ 4. Neither satisfied nor dissatisfied
- ☐ 5. Somewhat dissatisfied (GO TO QUESTION 59)
- ☐ 6. Very dissatisfied (GO TO QUESTION 59)
- ☐ 7. Don't know

SKIP TO QUESTION 62

=====

55. YOU DID NOT USE  
YOUR SPACE BAR

NOSPAC8

PRESS ENTER TO TRY AGAIN

56. What are the main reasons that you are satisfied with using circle hooks while fishing for striped bass on Lake Murray?  
(DNR LIST; CHECK ALL THAT APPLY)

CIRSAT 17:3-8

(CHECK ALL THAT APPLY)

survival

- ☐ 1. Easier to use in general
- ☐ 2. Catch more fish
- ☐ 3. Catch larger fish
- ☐ 4. Easier on the fish after release/greater chance of survival
- ☐ 5. Other
- ☐ 6. Don't know

IF (#56 = 0) GO TO #55

IF (#56 @ 5) GO TO #57

SKIP TO QUESTION 62

=====

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57. ENTER OTHER REASON FOR SATISFACTION  
WITH USING CIRCLE HOOKS  
(IN FIRST PERSON; 120 CHAR)

CIRSATST 18:1-120

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SKIP TO QUESTION 62

=====

58. YOU DID NOT USE  
YOUR SPACE BAR

NOSPAC9

PRESS ENTER TO TRY AGAIN

59. What are the main reasons that you are dissatisfied with using  
circle hooks while fishing for striped bass on Lake Murray?  
(DNR LIST; CHECK ALL THAT APPLY)

CIRDIS 19:1-6

(CHECK ALL THAT APPLY)

- |                          |   |
|--------------------------|---|
| <input type="checkbox"/> | 1. Difficult to use in general                          |
| <input type="checkbox"/> | 2. Catch fewer fish                                     |
| <input type="checkbox"/> | 3. Catch smaller fish                                   |
| <input type="checkbox"/> | 4. Harder on fish after release/less chance of survival |
| <input type="checkbox"/> | 5. Other  |
| <input type="checkbox"/> | 6. Don't know   |

IF (#59 = 0) GO TO #58

IF (#59 @ 5) GO TO #60

SKIP TO QUESTION 62

=====

60. ENTER OTHER REASON FOR DISSATISFACTION  
WITH USING CIRCLE HOOKS  
(IN FIRST PERSON; 120 CHAR)

CIRDISST 20:1-120

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SKIP TO QUESTION 62

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61. YOU DID NOT USE  
YOUR SPACE BAR

NOSPAC10

PRESS ENTER TO TRY AGAIN

62. In what regions of Lake Murray do you normally fish for striped  
bass during the summer?  
(READ LIST; CHECK ALL THAT APPLY)

REGION 21:1-7

(CHECK ALL THAT APPLY)

Bend)

☐ 1. Between the dam and Spence Islands  
☐ 2. Spence Islands to Shull Island and mouth of Bear Creek  
☐ 3. Shull Island and mouth of Bear Creek to The Gap  
☐ 4. The Gap to confluence of Saluda and Little Saluda R.(River

☐ 5. Up either river  
☐ 6. Other  
☐ 7. Don't know

IF (#62 = 0) GO TO #61  
IF (#62 @ 6) GO TO #63

SKIP TO QUESTION 64

=====

63. ENTER OTHER REGION OF LAKE MURRAY  
(IN FIRST PERSON; 120 CHAR)

REGIONST 22:1-120

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

64. At what depths do you most often catch fish during the summer on  
Lake Murray?  
(READ LIST; CHECK ONLY ONE ANSWER)

DEPTHS 23:1

(CHECK ONLY ONE ANSWER)

☐ 1. Invalid answer. Select another. (GO TO QUESTION 64)  
☐ 2. 0-29 feet below surface  
☐ 3. 30-59 feet below surface  
☐ 4. 60-89 feet below surface  
☐ 5. 90-119 feet below surface  
☐ 6. 120 feet below surface to bottom  
☐ 7. Don't know

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65. Would you say that you are checked by South Carolina Department  
of Natural Resources law enforcement officers for undersized  
fish, or being over the limit for striped bass, always,

sometimes, rarely or never?  
(READ LIST AS NECESSARY)

OFFICER 23:2

(CHECK ONLY ONE ANSWER)

- ☐ 1. Invalid answer. Select another. (GO TO QUESTION 65)
- ☐ 2. Always
- ☐ 3. Sometimes
- ☐ 4. Rarely
- ☐ 5. Never
- ☐ 6. Don't know

66. Great! We are just about through. The final questions are for background information and help us to analyze the results. I want to assure you that your answers are completely confidential.

DEMO

PLEASE PRESS ENTER TO CONTINUE...

67. First, how many days total did you fish for striped bass from January 1, 1999 to December 1, 1999 on Lake Murray?  
(PORTIONS OF A DAY COUNT AS A WHOLE DAY;  
MULTIPLE OUTINGS WITH A DAY COUNT AS A SINGLE DAY)  
(ENTER 999 FOR REFUSED/DON'T KNOW)

DAYSFISH 23:3-5

68. And since the 5/21 was put into effect, would you say that the number of days per year you fish for striped bass on Lake Murray has increased, stayed about the same, or decreased?  
(READ SCALE AS NECESSARY)

FISHMORE 23:6

(CHECK ONLY ONE ANSWER)

- ☐ 1. Invalid answer. Select another. (GO TO QUESTION 68)
- ☐ 2. Increased
- ☐ 3. Stayed about the same
- ☐ 4. Decreased
- ☐ 5. Don't know

SKIP TO QUESTION 70

=====

69. YOU DID NOT USE  
YOUR SPACE BAR

NOSPAC11

PRESS ENTER TO TRY AGAIN

70. Do you belong to or are you affiliated with any striped bass fishing club or organization?  
(DNR LIST; CHECK ALL THAT APPLY)

MEMBER 23:7-11

(CHECK ALL THAT APPLY)

- ☐ 1. Midlands Striper Club
- ☐ 2. Striper Kings of Greenville
- ☐ 3. Other
- ☐ 4. Don't know
- ☐ 5. No: None of these

IF (#70 = 0) GO TO #69

IF (#70 @ 3) GO TO #71

SKIP TO QUESTION 72

=====

71. ENTER OTHER STRIPED BASS CLUB OR ORGANIZATION  
(IN FIRST PERSON; 120 CHAR)

MEMST 24:1-120

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72. In what county in South Carolina do you live, or are you not a resident of South Carolina?  
(IF MORE THAN ONE RESIDENCE, ASK FOR PRIMARY)  
(ENTER 999 FOR DON'T KNOW/REFUSED)  
(ENTER 888 FOR NON-RESIDENT)

COUNTY 25:1-3

|\_|\_|\_|\_|

LOWEST VALUE = 1

IF (#72 = 888) GO TO #73

SKIP TO QUESTION 74

=====

73. In which state do you reside?  
(IF MORE THAN ONE RESIDENCE, ASK FOR PRIMARY)  
(ENTER 99 FOR DON'T KNOW/REFUSED)

WCHSTATE 25:4-5

|\_|\_|\_|

LOWEST VALUE = 1

74. And, finally, may I ask your age?  
(ENTER 999 FOR DON'T KNOW / REFUSED)

AGE 25:6-8

|\_|\_|\_|\_|

LOWEST VALUE = 1

75. That is the end of the questionnaire.  
Thank you very much, we appreciate your time and input.  
(IF ADDITIONAL COMMENTS, RECORD HERE IN FIRST PERSON; 120 CHAR)  
END 26:1-120

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76. OBSERVE AND RECORD RESPONDENT'S GENDER

GENDER 27:1

(CHECK ONLY ONE ANSWER)

_	1. Invalid answer. Select another. (GO TO QUESTION 76)
_	2. Male
_	3. Female
_	4. Don't know

77. TIME INTERVIEW WAS COMPLETED

ENDTIME 27:2-6

|\_|\_|\_|\_|\_|\_|

78. Please enter your initials.

INTVRINT 27:7-9

|\_|\_|\_|\_|

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79. Enter the area code and telephone number of number dialed.  
TELEPHON 27:10-19

|\_|\_|\_|-|\_|\_|\_|-|\_|\_|\_|\_|

LOWEST VALUE = 1

80. SAVE OR ERASE INTERVIEW.  
DO NOT ERASE A COMPLETED INTERVIEW!

FINISH 27:20

(CHECK ONLY ONE ANSWER)

|\_| 1. Save answers (GO TO QUESTION 82)  
|\_| 2. Erase answers  
|\_| 3. Review answers (GO TO QUESTION 3)

81. ARE YOU SURE YOU WANT TO ERASE THIS INTERVIEW?  
ONLY ERASE IF: Terminated (record on back),  
RF, BZ, NA, DS, BG, DL, AM

MAKESURE 27:21

(CHECK ONLY ONE ANSWER)

|\_| 1. No, do not erase the answers (GO TO QUESTION 80)  
|\_| 2. Yes, erase this interview

82. Date call was made

INTVDAT 27:22-29

|\_|\_|\_|\_|-|\_|\_|-|\_|\_|\_|  
Year Month Day

SAVE IF (#80 = 1)

## **OPEN-ENDED RESPONSES**

### Q10. Other reasons for satisfaction with the Department's management of striped bass on Lake Murray

THEY ARE VERY OPEN TO HELP WITH PROBLEMS; THEY ARE NICE PEOPLE  
THEY HAVE GOOD BOAT LANDINGS  
THEY DON'T BOTHER ME  
THEY COULD USE MORE OFFICERS  
THE RELATIONSHIP BETWEEN THE BIOLOGIST AND THE SERIOUS  
SPORTSMEN, AS WELL AS THE STRIPER BIOLOGIST GOOD ATTITUDE  
THE STOCKING PROGRAM  
THEY STOCK WELL  
SAFETY  
REDUCTION IN THE LENGTH LIMIT  
REDUCE THE LIMIT TO 18 INCHES, WATER IS BECOMING POLLUTED, NEED  
TO PUT REGULATIONS ON JET SKIS  
REDUCE THE LENGTH LIMIT TO 18 INCHES, INCREASE CREEL LIMIT TO  
EIGHT  
REDUCE THE LENGTH LIMIT TO 18 INCHES  
REDUCE THE LENGTH LIMIT TO 18 INCHES  
REDUCE THE LENGTH LIMIT TO 18 INCHES  
REDUCE THE LENGTH LIMIT DURING THE SUMMER MONTHS  
REDUCE THE LENGTH LIMIT DURING THE SUMMER  
REDUCE THE LENGTH LIMIT BECAUSE TOO MANY FISH DIE  
REDUCE THE LENGTH LIMIT  
REDUCE THE LENGTH FROM 21 TO 19 INCHES  
REDUCE SIZE LIMIT BECAUSE THE CHANGE IN WATER TEMPERATURE  
KILLS THEM IN THE SUMMER.  
REDUCE SIZE LIMIT  
REDUCE LENGTH LIMIT TO 20 INCHES  
REDUCE LENGTH LIMIT TO 18 INCHES DURING SUMMER MONTHS  
REDUCE LENGTH LIMIT TO 18 INCHES DURING SUMMER MONTHS  
REDUCE LENGTH LIMIT TO 18 INCHES  
REDUCE LENGTH LIMIT TO 18 INCHES  
REDUCE LENGTH LIMIT  
REDUCE LENGTH LIMIT. DURING SUMMER MONTHS SHORT FISH SHOULD  
BE ALLOWED TO BE KEPT, THERE SHOULD BE MORE OFFICERS  
REDUCE LENGTH LIMIT- 21 INCHES IS TOO LONG  
REDUCE THE SIZE LIMIT TO 20 INCHES  
PUT FORTH GOOD EFFORT  
PLENTY OF BAIT

YOU CAN PHONE-IN OUT OF STATE FISHING LICENSE  
NOT VERY MANY TROPHY FISH ANYMORE  
NEED MORE OFFICERS PATROLLING TO REGULATE LAWS  
NEED MORE OFFICERS  
NAVIGATIONAL SYSTEM  
THEY PUT A LOT OF EFFORT PUT INTO KEEPING FISH AND I LIKE SEEING  
THEM ON THE WATER CHECKING THINGS OUT  
GOOD LOCATION AND ACCESS TO LAKE  
I'D LIKE TO SEE THE LENGTH REGULATION INCREASED  
I LIKE SEEING BIOLOGISTS ON SIGHT CHECKING ON THE HEALTH OF FISH  
I KNOW GENE HAYES  
INDIVIDUAL STUDIES AND THEY TREAT IT AS A SPECIAL LAKE  
IN THE SUMMER MONTHS FISH HAVE A HIGH FATALITY RATE, THERE  
SHOULD BE A CREEL LIMIT AND NO LENGTH LIMIT  
THEY HELP OUT  
GOOD STOCKING PROGRAM, MONEY IS PUT BACK INTO WILDLIFE  
PROGRAM  
GOOD STOCKING AND RECORD KEEPING  
GOOD PLACE TO FISH  
GOOD CONTROL OF POPULATION  
GAME WARDENS DO A GREAT JOB  
FOR TROPHY FISH THERE SHOULD BE A 3 OR LESS CREEL LIMIT LAW  
ENFORCEMENT SHOULD BE STRICTER AT NIGHT  
EVEN WITH PRESSURES ON LAKE MURRAY, THE DEPARTMENT HAS BEEN  
ABLE TO MAINTAIN ONE OF THE FINEST STRIPED BASS FISHERIES  
ENJOYED THE FISHING. NOT OVERCROWDED  
DO A GOOD JOB OVERALL  
ALLOW PEOPLE TO KEEP FISH THAT ARE DEFINATELY GOING TO DIE  
REDUCE THE LENGTH LIMIT TO 18 INCHES; NEED TO INCREASE THE CREEL  
LIMIT TO EIGHT

Q17. What do you consider bass worth keeping?

SHOULD BE SEASONAL  
DEPENDS ON TIME OF YEAR  
IF IT SWALLOWS THE HOOK  
FIVE FISH OF ANY SIZE  
AS LONG AS IT'S WITHIN REGULATIONS  
DO NOT KEEP FISH NOT GOOD FISH TO EAT  
DO NOT KEEP ANY FISH  
CONTINUE TO HAVE GOOD MANAGEMENT IN KEEPING FISH IN LAKE  
CATCH AND RELEASE ONLY  
ANYTHING BIG ENOUGH TO BITE THE HOOK

ANY ONE  
ANY FISH WORTH EATING  
ANY FISH NO MATTER OF SIZE OR WEIGHT  
Q22. What do you consider quality striped bass?

BASS MARKINGS, OUTSIDE APPEARANCE  
THE CONDITION OF THE FISH  
STOCKY BUILD  
SAME  
NICE COLOR, NO USUAL MARKS  
I LOOK FOR HEALTHY FISH WITHIN REGULATION  
HEALTHY LOOKING FISH OF ANY SIZE  
HEALTHY  
GOOD COLOR TO IT AND HEALTHY LOOKING.  
I DON'T KEEP ANY  
ALL SIZES ARE QUALITY

Q29. What do you consider trophy striped bass?

DON'T KEEP FISH  
DO NOT MOUNT FISH; ONLY FOR EATING  
ANYTHING I CATCH

Q41. Other management options

STOCK MORE FISH DURING SUMMER MONTHS  
  
REDUCE LENGTH LIMIT TO 20 INCHES  
REDUCE THE KEEP  
NO CATCH-AND-RELEASE  
LOWER THE CREEL LIMIT  
INCREASE THE LENGTH LIMIT IN SUMMER TO 24 INCHES  
CATCH FIVE FISH AND LEAVE  
BAN THE USE OF LIVE BAIT DURING SUMMER MONTHS/BECAUSE THEY  
DONT SURVIVE CATCH AND RELEASE

Q 45. Other ways to increase chances of survival after release

USE HEAVIER EQUIPMENT  
TAKE HOOK OUT SO IT DOESN'T TEAR MOUTH, PUT MOUTH FIRST IN  
WATER  
RELEASE IT HEAD FIRST  
PUT HEAD FIRST IN THE WATER

NET INSTEAD OF GRAB, USE NEEDLENOSE PLIERS  
NEEDLENOSE PLIERS USE A NET TECHNIQUE  
MAKE SURE IT IS ACTIVE BEFORE RELEASED  
I USE GLOVES AND THEN SQUEEZE ON BOTH SIDES  
HOLD BY MOUTH  
HOLD BY LIP  
GRAB LOWER LIP  
GENTLY HANDLE  
GENTLE WITH FISH  
EASE INTO WATER  
DROP FISH IN HEAD FIRST  
I DON'T HANDLE THE FISH AT ALL  
DO NOT USE A NET  
DO NOT NET THE FISH  
DO NOT HANDLE FISH BY BODY  
CHUNK HIM IN THE WATER HEAD FIRST  
CAREFULLY TAKE HOOK OUT  
I CAN TELL RIGHT AWAY HOW BIG FISH IS

Q49. Other type of technique or bait

IT DEPENDS  
DO NOT FISH IN SUMMER MONTHS

Q54. Other reason for satisfaction with using circle hooks

WAY I HAVE ALWAYS DONE IT  
TYPE OF HOOK DOES NOT MATTER  
THEY WORK FINE  
MORE SUCCESS  
JUST LIKE THEM IN GENERAL  
I DON'T LOSE MANY FISH

Q59. What regions of Lake Murray do you normally fish for striped bass during the summer?

TOWERS BY DAM  
TOWERS AND HENDRICKS LANDING  
PINE ISLAND  
PINE ISLAND  
MUNC ISLAND  
MAIN RIVER RUN, IN DEEPER WATER  
LOWER LAKE ON DOWN  
JAKES

JAKES

ENTIRE LAKE

ENTIRE LAKE

ENTIRE LAKE

ENTIRE

DO NOT FISH DURING THE SUMMER MONTHS

DAM: FOUR TOWERS, ISLANDS NEAR PROSPERITY

DAM TO SHULL CREEK

DAM TO GOAT ISLAND

DAM TO EAST SIDE OF SHULL ISLAND

DAM TO BALMER ISLAND

DAM TO BALMER ISLAND

DAM AND FRONT REGION

DAM AND BILLY DREHER ISLAND

DAM AND BILLY DREHER ISLAND

DAM AND BALM ISLAND

BOMB ISLAND

BIGWATERS

BIGWATER

BIG WATER

BALM ISLAND SANDY BEACH AND IN THE BIG GAP

BALENTINE AREA (NE PART OF LAKE MURRAY) IS A MAJOR AREA THAT

LOTS OF US FISH

AREA BETWEEN GOAT ISLAND AND THE BRIDGE

ANYWHERE WITH DEEPER WATER

ALL THE CREEK RUNS, HILLS AND BEARDS AND BEAR CREEK

## **ADDITIONAL ANALYSES: CROSSTABS FOR SURVEY PARTICIPANTS WHO WERE CLUB MEMBERS**

In this section, analyses for respondents who were striped bass club members are reported. The number of respondents was very low (n=17), so any conclusions about beliefs of club members would be speculative at best.

### **Satisfaction with Fisheries Management on Lake Murray**

- 35% of club members rated the quality of the striped bass fishery on Lake Murray as excellent, 47% as good, 12% as fair, and 6% as poor.
- 47% of club members stated that the Fisheries Section of the South Carolina Department of Natural Resources did an excellent job with respect to the striped bass fishery on Lake Murray. Fifty-three percent reported that the Department did a good job.
- 100% of club members were satisfied (65% very and 35% somewhat) with the Department of Natural Resources' management of striped bass on Lake Murray.
- In order of importance, club members were satisfied with the quantity of fish on Lake Murray (59%), sufficient law enforcement (24%), good water quality (18%), 5 fish creel limit (18%), 21-inch length limit (18%), quality of fish health (12%), and abundance of large/trophy fish (6%).

### **Awareness and Perception of the 5/21 Regulation**

- 94% of club members reported that before taking this survey they were aware that Lake Murray was a put-grow-and-take fishery. Six percent were not aware.

- 76% of club members reported that fishing for striped bass on Lake Murray had improved (29% greatly and 47% somewhat) since the 5/21 regulation was put in place, 6% reported it had somewhat declined, and 6% reported it had stayed the same. Eleven percent did not know if the fishing had improved.

- 53% of club members reported that, since the 5/21 regulation was put into effect, there were more **quality** striped bass (18% much more and 35% somewhat more) on Lake Murray. Eighteen percent reported there were less quality striped bass (12% somewhat and 6% much less), 18% reported there were the same, and 12% did not know.

- 30% of club members reported that, since the 5/21 regulation was put into effect, there were more **trophy** striped bass (6% much more and 24% somewhat more) on Lake Murray. Forty-one percent reported there were less trophy striped bass (12% somewhat and 29% much less), 12% reported there were the same, and 18% did not know.

### **Definition of Keeper, Quality, and Trophy Striped Bass**

- 82% of club members stated size as the most important factor when defining a **striped bass worth keeping** and 18% reported weight to be a factor. (Multiple responses allowed)

- For those club members who reported size to be a factor when defining a striped bass worth keeping, 57% reported a size range of 20-23 inches as a 'keeper' size, 36% reported sizes of 24-27 inches, and 7% reported 12-15 inches.

- Of the club members who reported weight to be a factor when defining a striped bass

worth keeping, 67% stated that 5-7 lb. fish were ‘keepers’, and 33% stated 8-10 lb. fish.

- 59% of club members reported weight to be a factor when defining a **quality striped bass** and 53% considered size to be a factor. (Multiple responses allowed)

- Of the club members that reported weight to be a factor when defining a quality striped bass, 40% stated 8-10 lb. fish were quality striped bass, 20% stated 5-7 lb. fish, 20% stated greater than 16 lb. fish, 10% stated 11-13 lb. fish, and 10% did not know.

- Of the club members that considered size to be a factor when defining a quality striped bass, 67% stated 24-27 inch fish were quality, 22% stated that 20-23 inch fish, and 11% stated greater than 27-inch fish.

- 88% of club members reported weight to be a factor when defining a **trophy striped bass** and 24% considered size to be a factor. (Multiple responses allowed)

- Of the club members that reported weight to be a factor when defining a trophy striped bass: 27% stated 26-30 lb. fish were trophy bass, 20% stated 16-20 lb. fish, 20% stated greater than 30 lb. fish, 20% stated 11-15 lb. fish, 7% stated 21-25 lb. fish, and 7% did not know.

- Of the club members that considered size to be a factor when defining a trophy striped bass, 50% stated that 30-33 inch fish were trophy bass, 25% stated greater than 30-inch fish, and 25% did not know.



## **Impact of Catch-and-Release Fishing on Lake Murray**

- 65% of club members stated that the release of fish smaller than the size limit sometimes caused the death of the fish. Twenty-four percent reported that the release of fish smaller than the limit rarely caused their death, 6% reported that it always caused their death, and 6% reported that it never caused their death.
- 65% of club members agreed (53% strongly and 12% somewhat) that even if catch-and-release caused the death of some fish, it was acceptable in order to improve the striped bass fishery on Lake Murray. Thirty-five percent disagreed (17.6% somewhat and 17.6% strongly).
- Club members reported that catch-and-release in the summer months of August (77%), July (71%), and June (24%) was more of a problem for striped bass than in other months. (Multiple responses allowed) A smaller percentage of club members reported that catch-and-release was not a problem in any month of the year (12%), and 6% did not know if it was a problem.

## **Summer Catch-and-Release Management Options on Lake Murray**

- 65% of club members wanted the South Carolina Department of Natural Resources to allow 2 of the 5 fish creel limit to be less than the 21 inches in the summer months.
- 18% of club members wanted the South Carolina Department of Natural Resources to reduce the length limit to 18 inches during the summer months.
- 12% of club members wanted the South Carolina Department of Natural Resources to

not allow any striped bass fishing in the summer.

### **Compliance with Catch-and-Release Fishing Regulations**

- 100% of club members reported that they always released fish that were smaller than the legal size limit on Lake Murray.

### **Awareness of Catch-and-Release Publications**

- 53% of club members were not aware of any South Carolina Department of Natural Resources' publications regarding catch-and-release of striped bass and other sport fish species and 47% were aware.

### **Fishing Techniques Used on Lake Murray**

Responses were rank ordered by techniques used most often (multiple responses allowed):

- Kept the fish in the water as much as possible (47%),
- Cut the line if hooked deeply (41%),
- Made the catch-and- release process as quickly as possible (35%),
- Revived fish (35%),
- Minimized the handling once the fish was reeled in (24%),
- Used tools to remove hooks, including the use of gloves (24%),
- Played and landed the fish quickly (18%),
- Used artificial lures (18%), and

- Used barbless hooks/circle hooks (6%).
- 88% of club members used straight-lining live or cut bait, 29% used trolling/down-lining with riggers, and 12% cast artificial lures while fishing for striped bass on Lake Murray. (Multiple responses allowed)
- 59% of club members reported that they did not regularly use circle hooks during the summer months, while fishing for striped bass on Lake Murray and 41% reported they did.
- 86% of those club members who regularly used circle hooks were satisfied (71% very and 14% somewhat) with their experiences, and 14% were neither satisfied nor dissatisfied.
- Club members cited several reasons for their satisfaction with using circle hooks while fishing for striped bass on Lake Murray (multiple responses allowed): Easier on the fish after release/greater chance for survival (83%), able to catch more fish (33%) and easier to use in general (33%).

### **Area, Depth, and Days Fished on Lake Murray**

In rank order of area most often fished (multiple responses allowed):

- Between the dam and Spence Islands (82%),
- Spence Islands to Shull Island and the mouth of Bear Creek (24%), and
- Shull Island and the mouth of Bear Creek to the Gap (6%).

- 77% of club members reported most often catching fish during the summer on Lake Murray at depths of 30-59 feet below the surface, 18% reported depths of 60-89 feet, and 6% reported depths of less than 29 feet below the surface.
- 47% of club members fished from 11-20 days on Lake Murray from January 1, 1999 to December 1, 1999, 18% fished 31-40 days, 18% fished 51-200 days, 12% fished 1-10 days, and 6% fished 21-30 days.
- 53% of club members reported that since the 5/21 was put into effect, the number of days per year they fished for striped bass on Lake Murray had stayed the same, 41% reported an increase, and 6% reported a decrease.

## **Other Issues**

- 41% of club members reported that they were rarely checked by South Carolina Department of Natural Resources law enforcement officers for undersized fish, or being over the limit for striped bass. Twenty-four percent reported they were never checked, 24% reported they were sometimes checked, 6% reported they were always checked, and 6% did not if they were checked.